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INTERNATIONAL GOLD MOVEMENTS

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INTERNATIONAL GOLD MOVEMENTS

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PREFACE

The aim of the present book is to deal with international gold movements mainly from a practical point of view. It is the first book devoted exclusively to this subject, and the first attempt to go into its technical details, especially as regards gold points of the principal exchanges since the war. The information it contains has been collected by the author in the course of his six years' experience as Foreign Editor of *The Financial News*, by means of direct contact with bankers, foreign exchange dealers, and bullion brokers. The author wishes to express his gratitude to the great number of experts who have been of assistance to him, but the nature of a great part of the information published makes it impolitic for him to disclose its sources.

Part of Chapter VI. has been published in the March, 1927, September, 1927, and December, 1928, issues of *The Economic Journal*, and in the December, 1927, issue of *The Banker*, while small parts of most chapters appeared anonymously in the "Lombard

Street" column published daily by *The Financial News*. The author wishes to thank the Editors of these publications for authorising their reproduction. His thanks are also due to Mr. F. Whitmore, B.Com., for his assistance in the revision of the proofs.

P. E.

20 Bishopsgate, E.C.,
March 1929.

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CHAPTER I

INTRODUCTORY

SINCE the restoration of the gold standard in this country in 1925, international gold movements have attracted considerable attention, not only among theoretical economists and practical cambists, but also among the general public. Doubtless, this is due in part to a general increase in public interest in economic and, more particularly, monetary problems. Before the war our monetary system worked, comparatively speaking, fairly smoothly, and for this reason most people, apart from a small circle of experts, were inclined to ignore its very existence. Since 1914, however, monetary developments have left their mark on almost every aspect of everyday life, compelling the interest of the man in the street. Hence events relating to currency have been followed with much greater interest than before the war. As international gold movements have always played an important part in the working of our monetary system, it is only natural that they should have received their due share of this increased attention to monetary affairs.

In addition, there have been several special reasons why public attention has been focussed to an unusual extent upon international gold movements. Apart from a few short periods following the dis-

covery of new goldfields, gold has always been considered to be comparatively scarce. Its scarcity has become, however, particularly accentuated since the return of a number of countries to the gold standard during the last few years. The international price level is about 40 to 50 per cent above its pre-war average. Other things being equal, this in itself would increase the requirements of gold for the purpose of note cover to a corresponding extent. In reality, the increase of the note circulation has been, in many countries, in excess of the ratio of the increase of prices. Thus the cover of the note circulation, on the basis of the pre-war ratio of gold reserve, would, in itself, require a much larger amount of gold than before the war.

The basis of the reserve ratio itself has also changed in such a way as to necessitate more gold. Before the war the legal minimum of gold cover in countries with a gold standard was fixed on the basis of the amount of the note issue. According to a principle that has become increasingly popular since the return of a number of countries to the gold standard, the reserve ratio is now to be calculated on the figure of the note issue plus sight liabilities. This principle has been embodied in the banking legislation of several countries, and the tendency points towards its general adoption. An additional factor is the introduction of the gold standard in several countries which were on a silver basis or had an inconvertible paper currency before the war, or in which silver coinage played a restricted part. To mention one example, the complete demonetisation of silver in countries which formed part of the Latin Monetary Union has increased the gold requirements of those countries.

Admittedly, the supply of gold available for meeting the increased requirements has also increased. Apart from the natural growth of the gold stock not required for industrial consumption, the withdrawal of gold coins from circulation has also contributed to an increase of the total stock available for monetary requirements. The coins which are still in circulation are gradually finding their way into the vaults of the central banks, while the minting of new coins for active circulation is confined to a small number of countries. Most countries returning to a gold basis are adopting the gold bullion standard, and some of them are even content with the gold exchange standard. The statutes of several central banks admit the inclusion of a certain percentage of foreign exchange in the note cover. This measure is regarded, however, as temporary, in almost every case, and most central banks aim at accumulating in great haste a gold reserve large enough to cover the note issue without the inclusion of foreign exchange. With this object in view they are gradually converting their foreign currencies into gold even if their stocks exceed the ratio prescribed by their statutes.

Allowing for all these considerations, it is safe to assume that, on balance, the demand for gold for monetary purposes has increased to a greater extent than the amount of the world's visible supply. In addition, the discrepancy has been particularly accentuated by the changes in the distribution of gold that have taken place as a consequence of the war. While several countries—primarily the United States—have a large supply beyond their immediate requirements, other countries have been unable to replenish their gold stock depleted during and since the

war. Several countries with an excessive stock, such as Japan, Spain, and Germany, are reluctant to part with their surplus, and though their currency is still inconvertible, are, in fact, endeavouring to increase their gold holdings. Thus the entire burthen of the exceptional demand in excess of current production has to be borne by the few countries possessing a free gold market.

In the course of the nineteenth century the adoption of the gold standard in the greater part of the civilised world was a gradual process. The requirements thus created were easily met in consequence of the new gold discoveries which practically coincided with the establishment of the gold standard in most countries. On the other hand, the restoration of the gold standard after the war has been sudden. Within four years as many countries have adopted the gold standard as during the whole of the nineteenth century. There has been a real "gold rush", though in an inverted sense of the term. Some of the countries returning to a gold basis possessed, it is true, an adequate stock of gold, and even a surplus, and appeared in the international market as sellers of gold rather than buyers. This was so in the case of the Scandinavian countries and Holland. Most other countries, however, had to increase their gold reserve in order to be able to restore and maintain the gold standard. On this occasion there has been no coincident increase of production to meet the exceptional demand which has been much more urgent and impatient than at any time in history. As production is practically stationary, and the withdrawal of coins from circulation is a slow and declining process, the urgent requirements of one country can only be met out of the resources of other

countries. The gain of one central bank is almost inevitably the loss of another central bank.

According to a popular theory, the gold which was accumulated in certain countries after 1914 is bound to be "redistributed" and the *status quo* will thus be restored. This belief, together with many other misconceptions according to which the restoration of normal conditions necessitates the return to pre-war conditions, is unacceptable. There can be no question of redistributing most of the gold which left Europe since 1914, for the simple reason that its new owners are not prepared to part with the greater part of their acquisition. The United States is virtually the only country which does not object to heavy withdrawals of gold, up to a certain point, for the purpose of replenishing foreign gold reserves. It is a mistake, however, to imagine—as many European experts do—that either the American authorities, or the banking interests, or the public, are anxious to lose gold. When, in the course of 1928, the efflux assumed large proportions, the American Press began to show signs of uneasiness, and American experts discovered that, after all, they could not afford to lose as much gold as they had imagined without provoking a contraction of credit. It is admittedly true that the Federal Reserve Bank parted with large amounts of gold freely, without making any attempts to check the efflux. In fact, it has even encouraged shipments whose destination it approved. But this attitude was due, not to any desire to get rid of its surplus, but to its policy aiming at a contraction of credit in order to check the Wall Street boom. It is likely to continue to maintain a liberal attitude towards foreign demand so long as its big surplus is not absorbed by an

increase of domestic requirements accompanying its immense economic expansion and financial evolution. Owing to this increase, the United States requires to-day a larger gold reserve than in 1914. It is impossible to foresee how far its requirements will further develop, and the authorities are therefore desirous to retain an ample margin of surplus gold in anticipation of future expansion.

The same holds good, though perhaps to a less extent, in the case of other countries which increased their gold stock during and after the war. The economic activities of Latin-American countries, for instance, have expanded considerably, so that the monetary requirements of these countries are now greater than before the war. At the same time their financial situation has improved, and they are not only desirous but also able to keep a much larger gold reserve than previous to 1914. In view of their immense scope for expansion, they are more likely to be buyers than sellers of gold. Their surplus, therefore, is not available for redistribution.

Apart from the United States, most other countries with a free gold market work on a relatively narrow margin, and are sensitive to comparatively moderate withdrawals, which tend to produce a marked effect upon their credit situation. That, in turn, is bound to affect everyday life. An increase of the Bank Rate, provoked by the withdrawal of gold, affects every section of the community. This explains the great interest with which the man in the street follows international gold movements.

The change in the character of the gold standard also tends to increase the importance of international gold movements as contrasted with domestic gold

movements. During the nineteenth century, gold played a dual part in the monetary system of this country. It fulfilled an approximately equally important task in domestic circulation and in international relations. Already before the war there was a definite tendency towards the diminution of the internal rôle of gold, and towards an increase of its international rôle. Since the war, Great Britain and several other countries have adopted a monetary system in which gold has practically ceased to play any part in the internal monetary sphere. The Currency and Bank Notes Act of 1928 has dealt a final blow at the internal monetary use of gold in this country. The object of clause 11, empowering the Bank of England to buy any amount of gold held in this country in excess of £10,000, provided that it is not wanted for *bona-fide* industrial or export requirements, is to concentrate in the hands of the central institution all gold available in the country for monetary purposes, so as to provide for the requirements arising from the international monetary use of gold. While before the war the domestic gold transactions of the Bank—the issue and withdrawal of sovereigns to and from internal circulation—were of a great importance, at present they are insignificant as compared with international gold movements. They are confined to the sale of small amounts of bar gold for the requirements of the home trade, whenever the supply available in the open market does not cover these requirements, and to the gradual withdrawal of sovereigns hoarded by the public, through the channels of the joint-stock banks. The relative importance of internal gold movements will continue to decline in sympathy with the reduction of the

amount of sovereigns still held outside the central bank.

The novelty of free gold movements in changed circumstances has also added to the general interest in the movements of the yellow metal. The arrival of the first gold consignment since the war from the United States to this country at the end of 1927 was an event of great interest to a generation which had become accustomed to witness only westward gold movements. The atmosphere of secrecy and mystery that surrounds many gold transactions incites the curiosity of a public which would otherwise take little interest in them. The "Unknown Buyer" of gold looms large in the popular imagination, competing for popularity with the "Man with the Iron Mask", or the "Mystery Man of Europe". There is much more mystery about gold movements than there was before the war. At the same time, more attention has been called to it by campaigns demanding more information about gold movements. Even the popular Press has taken an interest in gold shipments, to which prominent headlines are often devoted.

From the point of view of theoretical economics it is extremely interesting to watch the working of the changed system in the changed circumstances. Before the war the meaning of the gold standard was clearly defined, and the conditions in which it worked were practically settled. The correct definition of the post-war gold standard, on the other hand, is still undecided. Its criterion, limitations, scope, and spirit have not yet had the opportunity to become crystallised during the short period that has elapsed since the system came into operation. To quote only one example, the meaning of the freedom of gold markets is

interpreted in an entirely different sense than before the war. It is understood that central banks themselves are not at liberty to take advantage of this freedom without the consent of the other central banks involved. It will take the experience of a number of years before a code of rules governing the system is once more clearly defined. Meanwhile, the problems arising in connection with international gold movements deserve particular attention, as their solution will largely contribute to the evolution of the post-war conception of the gold standard. The conditions in which the system works are subject to considerable and frequent changes. From time to time new situations arise, and the conclusions reached on the basis of pre-war experience and of the short post-war experience requires frequent reconsideration and amendment. Very often, points of a purely technical nature lead to substantial modifications of fundamental principles, or at least to debates which contribute to clarify the situation. There are frequent test cases—such as, for instance, the Midland Bank's gold imports in 1928 which disregarded loss of interest—the outcome of which is determined by the attitude of the authorities and the experts, and sometimes of the Press and public opinion.

From the point of view of bankers, the practical significance of international gold movements has increased considerably. The possibility of earning a profit on arbitrage has increased, though it should not be overrated. Uninitiated people are inclined to make exaggerated estimates of the profits on gold shipments. In the majority of cases the margin is nominal, and unforeseen circumstances often convert the anticipated profit into a loss. The balance of net profit is comparatively

insignificant. The main reason why bankers have to keep a watchful eye on international gold movements is, not the possibility of direct profit that can be derived from exchange operations, but the effect of the gold movements upon the markets. The amount and frequency of gold movements tend to be rather greater than before the war, and to affect the Money Market, Foreign Exchange Market, and Stock Market to a greater extent than in pre-war days.

From the point of view of industrial and commercial interests, the importance of gold movements has also increased. As we work with a narrower margin than before the war, and the extent of gold movements tends to be wider, their influence upon rates of interest and the supply of credit is becoming much greater than prior to 1914. The daily bullion bulletins of the Bank of England are now being watched, consequently, also by business circles outside the City with much greater attention. As anything that affects the business situation also affects employment, even the working classes are bound to take a greater interest in gold movements. International gold shipments tend to affect the cost of living to a greater extent than before the war and attract therefore the attention of consumers.

In view of this greatly increased interest in gold transactions it is remarkable how little is known about the subject. Information as to current movements is in many cases highly inadequate, and it often becomes available only with considerable delay and remains unconfirmed. Even in banking circles comparatively little is known about the technical details of gold movements. Most material published on the subject only touches the surface, confines itself to generalities,

or dates before the war. The statistical material of past gold movements has been neglected and is grossly incomplete. It is desirable that more information should be available, and also that the man in the street should possess sufficient knowledge to enable him to appreciate the information given.

CHAPTER II

COMMERCIAL TRANSACTIONS

When dealing with the motives of international gold movements, it is necessary to discriminate between direct and fundamental motives. Direct motives are, for example, the arbitrageur's endeavour to benefit by the deviation of exchanges from their gold points, or the desire of central banks to increase their gold reserves. Fundamental motives, which can only work through the intermediary of direct motives, include, among others, over-production, credit expansion, etc. We propose to confine ourselves here to direct motives, while indirect motives are dealt with in Chapter IV.

The direct motives of international gold shipments may be divided into three groups, viz. administrative, commercial, and special. The first group is responsible for the shipment of gold from the principal reserves of central banks to their external reserves, the repatriation of gold held in external reserves or on deposit, the shipments of gold for minting purposes, etc. This class of gold movements is merely a physical displacement of gold, which does not affect the reserves of the banks concerned, or the gold market, or any of the markets which are affected by other kinds of gold movements. From the point of view of the markets, such operations are of no more importance than mere transfers of gold stocks from one vault of the same

bank to another. For this reason there is no need to enlarge upon this class of gold movements. For our present purpose, gold movements must involve a change in the ownership of the metal, as between different countries. It is a matter of indifference whether this change entails an immediate or subsequent physical displacement of the gold from one country to another. From the point of view of its effect upon the market, it makes little difference whether the gold is actually taken away by the purchaser or whether it is left on deposit in the country in which it was bought.

Gold movements, in the narrower sense defined above, can be divided, according to their motives, into two main categories: commercial and special transactions. There is no rigid line of demarcation between the two. Sometimes a transaction which appears to have been brought about by commercial motives is in reality non-commercial, and vice versa. Though the division is far from ideal, it is, nevertheless, preferable to the popular division into special transactions and exchange or arbitrage transactions, two terms which are usually used indiscriminately. The shipment of South African gold to London, for instance, could not be called either an exchange transaction or a special transaction, but it is classed, without hesitation, among the commercial transactions.

According to a popular belief, the criterion of the commercial or non-commercial nature of a transaction is whether it is undertaken by a monetary authority—a Government or a central bank—or by a firm or individual. Although the adoption of this criterion would greatly simplify the classification of the shipments into either category, it is, nevertheless, unacceptable. Its basis is the assumption that a firm or indi-

vidual transfers gold exclusively for the sake of the direct profit yielded by the transaction, and that a Government or central bank transfers gold exclusively for special purposes, always disregarding profit considerations. Neither of these two assumptions is correct. Gold is occasionally shipped by private interests, even if the transaction does not result in any direct profit. There may be ulterior motives which render it desirable to ship gold without any profit, or even at a slight loss. For instance, gold shipped without a profit or at a loss for the sake of publicity, or for the sake of its effect upon the markets (about which more will be said in a later chapter), cannot be regarded as a commercial transaction, even though the shipment is made by firms or individuals. On the other hand, shipments by authorities often arise from commercial motives. In fact, certain central banks, desirous to secure for themselves all the profits arising from gold shipments, discourage private arbitrageurs, or at least compete with them, and themselves arrange the shipment, whenever the exchange situation makes it profitable. Central banks are at an advantage in this competition, as they need not consider any loss of interest. Occasionally the authorities of countries which are not on a gold basis and where private arbitrage is therefore impossible, make gold shipments to correct the exchanges whenever these move beyond the theoretical gold points. These transactions are evidently of a commercial nature, even though they are undertaken by a monetary authority instead of private interests.

Another criterion which might be adopted is whether or not the shipment has actually resulted in a profit. It is difficult, however, for anyone, apart from those directly concerned, to ascertain this. The margin is

usually very narrow, and the expenses are by no means inelastic. The firm engaged in the shipment may have discovered a cheap route unknown to everybody else, so that a shipment which may appear unprofitable to outsiders may in reality be profitable. But it is, in reality, not so much actual results as the motives of the shipments that matter. As the margin of profits is very narrow, miscalculation or unforeseen events may easily convert an anticipated gain into a loss. This, however, does not alter the commercial character of the transaction if undertaken for the sake of profit.

Thus commercial transactions may be defined as gold shipments undertaken mainly out of considerations of direct financial profit, while special transactions are shipments which are undertaken for special motives without any expectation of earning any direct profit on the shipment. The division of shipments in practice into one of these two classes is often by no means easy. If it is difficult for outsiders to ascertain whether or not the shipment has actually yielded any profit, it is even more difficult to ascertain whether or not it was undertaken mainly with a view to earning direct profit on the transaction.

Commercial transactions include the following categories of shipments:

(1) *Shipments from Producing Countries to their Natural Markets.*—Natural markets are not necessarily the centres where producers can obtain the highest possible price. Often factors other than price considerations, such as convenience, tradition, the regularity of means of transport, have a certain influence in determining the natural markets of gold produced in a particular country. The greater part of the South African gold output is marketed in London,

often even if shipments to other centres would secure, in theory, a slightly higher profit to producers. This is largely due to London's traditional position as the world's principal gold market. The regularity with which its supply is replenished has attracted a regular demand which, in turn, has made it convenient to the South African and other producers to maintain a regular supply, even if the exchange situation would render it, in theory, more profitable to ship the gold elsewhere. If, however, the difference widens, gold is diverted from London to other markets. The tendency in this respect points decidedly towards the increase of direct shipments, *i.e.* shipments made direct to foreign countries without the intermediary of London. While before the war such shipments were exceptional, since the war they have become more frequent. In order to save double freight the greater part of the Indian demand is met by direct shipments from Durban. The firmness of the Argentine peso and other South American exchanges in 1927, coupled with exceptionally cheap freight rates quoted by Japanese steamship lines, resulted in considerable direct shipments from South Africa to South America. No gold has yet been shipped, however, from the Cape to New York or any European centre other than London merely as a result of exchange movements. Whenever gold was taken elsewhere than London there was always a motive other than the exchange rate. Thus shipments to Buenos Aires were made mostly in payment for South African grain imports from the Argentine. Gold taken for Brazil constituted mostly special transactions. The proceeds of Brazilian loans abroad had to be transferred in the shape of actual gold, independently of any considerations of profit or exchange.

In some countries, such as, for instance, West Africa, the output is too small to make its shipment elsewhere than to London a paying proposition. The same factor is probably responsible, in part, for the arrangement whereby the gold output of the Belgian Congo is to be sold to the National Bank of Belgium instead of to the highest bidder in London. The shipment of some of the newly produced Russian gold to London, when it would have been more profitable to sell it in Berlin, probably served the purpose of publicity. In some cases the conventional market for the gold output is the producing country itself, and producers do not export it even though they could obtain a slightly better price abroad.

(2) *Shipments from the Markets to the Consumers.*—This category includes the shipment of gold for industrial and commercial purposes. The exchange rate plays a certain restricted part in the purchase of gold bought for industrial consumption, but the shipment of South African gold from London to the Swiss watch-making industry could hardly be classed among arbitrage transactions. Exchange rate considerations play a subordinate part also in the shipment of coins for commercial purposes to countries where they are subject to semi-barter, or where they can be sold at a premium. Thus the demand for sovereigns by Mahommedan countries whose population requires them for their pilgrimages to Mecca is not due to any exchange consideration. In those countries sovereigns are treated as merchandise, and not as a foreign currency or a quantity of gold. The situation is similar regarding the demand for ducats for shipment to North-eastern Africa. The demand for coins for ornament in primitive countries is also independent, to some

extent, of the exchange factor. All these shipments are commercial transactions, without being arbitrage or exchange transactions.

(3) *Shipments through Exchange Transactions proper.* —Every exchange transaction is a commercial transaction, but many commercial transactions—those included under (1) and (2)—are not exchange transactions. The terms exchange transaction and arbitrage transaction are usually used indiscriminately, though there is a considerable difference between them. The object of the exchange transaction is to substitute the shipment of gold for the transfer of funds through the intermediary of the Foreign Exchange Market. The object of the pure arbitrage transaction is the shipment of gold, without any intention of transferring funds, to take advantage of the discrepancy between exchanges and their gold points.

Claims arising from foreign trade are settled by means of exchange transactions. It would be a mistake to imagine, however, that it is importers and exporters themselves who take the initiative in the shipment when they find that it is cheaper to buy gold than to buy foreign exchange. In the vast majority of cases, it is not merchants but banks and bullion brokers who arrange gold shipments. Exceptionally large firms, such as, for instance, Argentine grain exporters, may occasionally carry out exchange transactions. Most importers and exporters, however, carry on their business without ever making any transfer of funds by means of gold shipments, which require a highly specialised knowledge and experience. Merchants simply instruct their banks to make the transfer, and it is the latter, on their own initiative and mostly on their own account, who make tranfers by means of

exchange transactions, when that alternative is preferable to the purchase of foreign currencies. Occasionally, exchange transactions are made even if the exchange does not move beyond its gold points and when, in theory, it is more profitable to buy exchange. Whenever the exchange is in the close vicinity of its gold export point, and a larger transaction is expected to force it beyond that point, it is preferable to ship gold at a slight apparent loss, for the operation through the Foreign Exchange Market would prove to be more expensive. It would not be profitable on such occasions to make arbitrage transactions proper, *i.e.* to ship gold without any necessity of transferring funds. This is one of the reasons why gold may begin to move through exchange transactions before it begins to move through arbitrage transactions. In the case of an exchange which has a bad market the difference between the gold point for exchange transactions and for arbitrage transactions tends to be rather wide, as the transfer of funds through the Foreign Exchange Market tends to affect the exchange to a greater extent. It will be seen in a later chapter that the need to cover gold operations by means of forward exchange transactions, which exists for arbitrage shipments, but does not exist for exchange shipments, is an additional factor in favour of the latter.

Exchange transactions take place, apart from the payments made in connection with foreign trade operations, in connection with international capital movements, whether temporary or permanent. Thus when a bank is desirous to tranfer funds to another centre in order to take advantage of the higher rates of interest, or of the prospects of an appreciation of the exchange, the transfer may be made through exchange

transactions. If a bank wishes to repay a foreign credit which it did not cover by means of a forward exchange transaction, the settlement may be made through an exchange transaction. Similarly, the transfer of the proceeds of a foreign loan, or the repayment of foreign loans falling due, or the purchase or sale of securities abroad, may give rise to exchange transactions. In all these cases gold can be shipped without any need for covering the transactions in the forward exchange market, and even at a rate slightly within the gold points.

(4) *Shipment of Gold through Arbitrage Transactions proper.*—The sole object of these transactions is to take advantage of temporary deviations of exchanges from their gold points. These operations do not result from the necessity of making any payment or the intention to transfer funds abroad. In most cases, the speculative risk of exchange movements is eliminated by means of a forward exchange transaction. This, however, does not mean that arbitrage transactions do not contain any speculative element. If the exchange moves only slightly beyond its theoretical gold point there is always the risk that some unforeseen expense or delay may convert the anticipated profit into a loss. Occasionally the speculative element is accentuated by cutting the calculation too fine, especially as to the time of transport. In arbitrage the speculative element plays, however, a subordinate part.

Although it is contrary to the principles of prudent banking to keep open positions in foreign exchanges, in practice shippers of gold do not always cover the exchange risk. Sometimes they combine gold arbitrage with exchange speculation. As the cost of the forward exchange transaction is thus avoided, arbi-

trage shipments can be undertaken, in such circumstances, on the basis of practically the same exchange rate at which it becomes profitable to make shipments through exchange transactions. The difference between such speculative arbitrage transactions and exchange transactions is that in the latter case no exchange risk is involved. Occasionally, importers of gold avoid both exchange risk and the cost of forward exchange operation, through financing the shipment in the importing centre. The disadvantage of this solution is that rates of interest in the importing centre are usually higher than in the exporting centre.

Since the war, in the majority of cases the initiative for arbitrage transactions has been taken largely by arbitrageurs of the importing country. This is so because, though the gold market may be free, most domestic firms are reluctant to avail themselves of this freedom for fear of incurring the displeasure of the authorities and the condemnation of the Press and public opinion. Occasionally, pressure of the authorities exercised unofficially to prevent the efflux of gold renders the freedom of the gold market completely illusory. In other cases the export of gold through arbitrage is confined to foreign institutions which are in a position to disregard official disapproval of the transactions. New York is at present practically the only centre where local institutions may freely engage in gold exports without having to consider the feeling in official quarters. The reason for this is that there is a large surplus of gold which the Federal Reserve authorities are willing to lose, while other central banks are anxious to increase their holdings or at least to retain the stocks they possess.

CHAPTER III

SPECIAL TRANSACTIONS

Though no figures comparing the amounts of commercial and non-commercial transactions before and after the war are available, there is no doubt that the ratio between them has changed considerably in favour of the latter. During the war, of course, transactions were almost exclusively non-commercial, while even after the war it was not until the return of this country to the gold standard that commercial transactions began to assume substantial proportions. Those who expected that special transactions would be reduced to comparative insignificance have been disappointed. Notwithstanding the return of a great number of countries to the gold standard, special transactions continue to occupy a prominent place.

Before the war, if a central bank wished to acquire gold it manipulated the Bank Rate in such a way as to attract gold by means of exchange and arbitrage transactions. If it was particularly anxious to increase its gold reserve it encouraged the influx of gold by artificial means, such as the fixing of a premium over and above the legal buying price, or the granting of loans free of interest, or the accepting of gold delivered at branches more conveniently situated than the head office. All these measures did not change the commercial nature of the shipments. It is only on rare

occasions that a central bank resorted to direct purchase of gold abroad irrespective of exchange considerations. Since the war, most central banks have endeavoured to increase their gold reserves to a great extent within the shortest possible time. Many of them were not on a gold basis, and could not therefore expect to acquire gold by commercial transactions. Even for those which were on a gold basis, the acquisition of gold by means of exchange transactions, supplemented by pre-war methods of stimulating a gold influx, appeared to be too slow a process. Moreover, in some cases the gold reserves were well in excess of the legal minimum, and to raise the Bank Rate to an abnormally high figure in order to attract gold would have provoked the protests of the business interests affected. Rather than expose themselves to criticism, central banks were prepared to pay a higher price and acquire the gold through direct purchases, either in the open market in London, or from another central bank. Exchange considerations were not altogether disregarded; the purchases were made in the centre where gold could be obtained at the lowest possible price. In most cases these transactions involved, nevertheless, a loss to the buyer.

It would be a mistake to imagine that special transactions are aimed exclusively at the increase of gold reserves. A large number of special transactions have been carried out with the opposite object in view. In 1925 the Netherlands Bank was desirous to convert part of its surplus gold-holding into earning assets, and to that end it paid in large amounts of sovereigns to the Bank of England, though there was no particular need to support the guilder, which was well within its gold points. From time to time the Soviet Govern-

ment has exported large amounts of gold, mainly to this country or to Germany, to meet the deficit of the Soviet Union's foreign trade. On several occasions the Danish National Bank has exported gold in order to increase its foreign exchange reserve. In 1928 the Bank of Spain shipped 2,000,000 sovereigns to the Bank of England, in order to support the peseta. The Reichsbank, though it was under no obligation to sell gold, sold some of its reserve held abroad on occasions when the reichsmark depreciated beyond gold export point. Comparatively little is heard about these transactions —apart from the Russian gold exports, which received ample publicity on account of the legal action undertaken by the Bank of France—because the influx of gold is almost always welcome and meets with no criticism. On the other hand, the purchase of gold by means of special transactions is often subject to adverse comments, and attracts, therefore, much attention.

Although the principal motive for buying gold through special transactions is the replenishment of the stock to the legal minimum or the extension of the basis of credit, or the increase of the safety margin over the legal minimum, there are sometimes secondary motives. The declared object of the French gold purchases in 1927 from the Bank of England and from the open market, as well as from New York, was to create monetary stringency abroad, especially in London, in order to discourage the transfer of funds to France and thus to check bull speculation in francs. It was believed, however, in some quarters that motives of prestige also influenced the French gold policy. Since, from 1914 until 1927, France's financial influence was paralysed owing to the depreciation and fluctuation of the franc, it was difficult for her financial leaders to

resist the temptation to take the first opportunity of re-asserting the importance of France in the sphere of international finance. Political motives also exert an occasional influence on gold movements through special transactions. The heavy German gold purchases in 1928 are believed to have been in part responsible for the resumption of French gold purchases abroad. According to one theory, there was a financial "armament race" between the two rival nations.

Several attempts have been made to regulate the demand of central banks for gold. The first steps in this direction were the resolutions of the Brussels and Genoa conferences against an excessive international demand for gold, on the ground that it would tend to endanger the stability of the international level of prices. One of the principal objects of the movement towards co-operation among central banks has been the application in practice of these resolutions. Until 1927 this object was more or less attained. Most countries which stabilised their exchanges and restored the gold standard owed the success of their monetary reconstruction to the support received from the Bank of England and the Federal Reserve Bank of New York. They were willing, therefore, to submit their gold policy to the approval of these institutions. It was agreed that their requirements would be met gradually out of the fresh supply of South African gold, and from the surplus gold of the Federal Reserve system. The Bank of England has taken charge of the purchases in the open market in London on behalf of the continental central banks, so as to avoid the clash of their demand.

These arrangements worked satisfactorily until the spring of 1927, when the Bank of France appeared on

the scene as a large purchaser of gold. As France carried out the stabilisation of her currency without any external aid, she felt entitled to pursue an independent gold policy. The French gold purchases in London, which were made in defiance of the protests of the Bank of England, brought about a violent campaign in the British financial Press. As the attitude of the Bank of France was known to have been inspired by M. Poincaré, the French intervention in the London gold market was described as a "financial Ruhr adventure". Largely as a result of these criticisms, but also prompted by the desire to participate in the movement of co-operation between central banks, the Bank of France eventually agreed to comply with the fundamental principle of co-operation. At a conference of the leading central banks held in Washington in July 1927, an agreement was reached as to the principle of non-interference of central banks with each other's gold reserves. According to this principle, no central bank is to withdraw any gold from another central bank without the latter's consent. The same rule also applies to the gold available in the open market in London, which is rationed out among the claimants in agreement with the Bank of England.

In theory the understanding is perfect. In practice, however, there is a very important flaw which considerably reduces the beneficial effect of the co-operation of central banks. The agreement only binds the central banks not to make direct purchases from other central banks. It does not restrict indirect purchases made under the guise of commercial transactions. This question was raised in connection with the heavy shipment of gold for Germany towards the end of 1928. Technically, these shipments were normal arbitrage transactions,

undertaken for the sake of profit arising in consequence of the appreciation of the reichsmark beyond its gold point. The Reichsbank was anxious to emphasise its neutrality towards the movement, but it was none the less obvious that the influx was officially encouraged. Gold delivery was accepted in centres other than Berlin, such as Cologne, Bremen, and Hamburg, though the Reichsbank was under no legal obligation to do so. The Reichsbank was, moreover, responsible for the exchange movement causing an influx. Owing to excessive borrowing abroad, the reichsmark displayed an exceptionally firm tendency. Instead of counteracting this unnatural trend, the Reischbank further accentuated it, not only by maintaining the Bank Rate at a high figure, but also by means of selling part of its foreign exchange reserve. It was noticed that large gold purchases on German account left the Foreign Exchange Market unaffected, probably because the Reichsbank supplied the currency required for the transactions.

In answer to British Press criticisms, inspired statements in the German Press pointed out that the Bank of England did not disapprove of the transactions. This was in accordance with facts. The Bank of England regarded the gold efflux to Germany as an alternative to an efflux to New York, which was considered the greater of the two evils. No attempt was made, for this reason, to prevent the efflux to Germany by any special agreement with the Reichsbank.

Thus, for the present, central banks are entitled to deplete each other's gold reserves, so long as their purchases are disguised as commercial transactions. It is reasonable, however, to assume that on a future occasion, when such disguised special transactions are

disapproved by the central bank whose gold reserve is thereby reduced, the question will be raised whether the principle of non-interference should not be extended to cover indirect purchases. The solution is not so simple as for direct purchases. Most devices applied to encourage German gold imports in 1928 were in use already before the war, and were regarded as part of the normal activities of central banks. This, however, is hardly an argument in favour of tolerating the system under the changed conditions. Before the war there was no shortage of gold, so that there was no particular objection to any artificial encouragement of international gold movements. At present, however, these artificial means of stimulating commercial transactions are as harmful as direct special purchases themselves. Technically, there is a difference between them as to the form in which they take place, but there is no difference as to their effect.

Even if we agree as to the necessity of applying the principle of non-interference to disguised special transactions, it is by no means easy to define them. It is difficult to say when the attitude of a central bank aims merely at the fulfilment of its normal function and when it is a disguised manœuvre to circumvent the principle of non-interference. The difference between defending one's own gold reserve and attacking someone else's is merely one of degree. The policy of a central bank is influenced by a number of considerations, and it is difficult to single out any one of them as being responsible for any particular action. For instance, the reply of the Reichsbank to criticisms that it has maintained a high Bank Rate in order to attract gold might well be that it had to maintain a high rate so as to prevent the repetition of the specu-

lative boom which culminated in the Black Friday of May 13, 1927. It would be possible, none the less, to regulate by agreement transactions which are obviously indirect purchases.

Most special transactions in the open market are carried out by the Bank of England on behalf of the foreign central banks. The gold is usually announced to have been taken for an "undisclosed destination". The secrecy that surrounds these transactions attracts much attention, and the "Unknown Buyer" has become a popular figure in the headlines of the Press. In most cases there is no genuine reason for secrecy, as the foreign buyers themselves announce the purchase at the first opportunity.

An unusual example of special transactions was provided by the gold exports of Brazil. Every Brazilian loan agreement concluded since 1927—whether by the Federal Government, State Governments, or Municipal authorities—has included a clause according to which the issuing houses have to transfer to Brazil the proceeds of the loans in the shape of actual gold. When the loans were issued in the United States, gold was taken from New York. When they were issued in London gold was usually shipped from South Africa.

Contrary to popular belief, special transactions are occasionally undertaken, not only by authorities but also by private firms. Gold shipments have considerable publicity value in given circumstances, for the sake of which it is worth while to lose a few thousand pounds in the shipment. For example, the first shipment from New York to London since the war was undertaken at the end of 1927 at a nominal loss for the sake of the publicity attached to the transaction. When in the autumn of 1928 the first gold shipment

was made from London to New York, indicating a turn of the trend, it was undertaken at a loss, despite general disapproval on both sides of the Atlantic, by a new firm of brokers in New York which hoped to gain prominence by such means. This factor is, however, losing its importance, as the novelty of gold movements wears away.

Another inducement of far greater importance for undertaking gold shipments at a loss is the anticipation of its effect upon the markets. As will be explained in detail in Chapter V., gold shipments tend to have an effect upon the Money Market, Foreign Exchange Market, Gilt-edged Market, and, in certain circumstances, upon the general tendency of the Stock Exchange. Those who arrange the shipments are in a position to discount its effect upon the markets, so that they are likely to be more than compensated for their losses on the shipment. This "bluff" cannot, however, be repeated too often. If the market realises that the shipments are not genuine, their effect is likely to become insignificant.

From the point of view of monetary stability the great disadvantage of special transactions is that they cannot be foreseen. Commercial transactions are foreshadowed by the movement of the exchanges, which are usually gradual, and give timely warning to the market to anticipate the gold movements. Their effect on money rates is, therefore, produced gradually. Special transactions, on the other hand, usually take place without any preliminary warning, and reach the Money Market as a thunderbolt from the blue sky. Their effect tends to be, therefore, much more pronounced and unsettling than that of a commercial transaction of the same amount. Moreover, commercial

transactions have their natural limits, as they tend to provoke a reaction in the exchange. Special transactions, on the other hand, may be carried on indefinitely irrespective of their effect on the exchange. For this reason they are calculated to create a stronger current of pessimism and more uncertainty than commercial transactions.

CHAPTER IV

CAUSES OF GOLD MOVEMENTS

The immediate motives of gold movements, whether commercial or special, are themselves effects of indirect causes which, in turn, may be the result of other sets of causes. When an arbitrageur despatches gold for the sake of a narrow margin of profit he unconsciously lends himself to act as the executive hand of fundamental tendencies. There are a great variety of forces capable of setting in motion tendencies that become ultimately responsible for gold shipments. They may be divided into two classes according to whether or not they act through their effect upon exchange rates. As has been shown in the two preceding chapters, special transactions and certain kinds of commercial transactions, such as the shipment of gold from the producer through the market to the consumer, are largely independent of exchange movements, while exchange transactions and arbitrage transactions are the result of the deviation of exchange rates from their gold points.

The motives of special transactions are usually either a desire for an increase or reduction of the amount of the gold reserve, or profit earned indirectly through the effect of gold shipments on the market. Questions of prestige, political considerations, and a great variety of other motives, also play occasionally a more or less important part in bringing about special

transactions. In most cases they do not originate from any fundamental economic tendencies, while in many cases they are carried out in defiance of economic tendencies. Being essentially the outcome of arbitrary human decision, they are not governed by any rules. The motives of shipments from producers to consumers, with or without the intermediary of a market, are self-explanatory and need no further examination.

The fundamental causes affecting gold shipments through their influence on the exchange deserve particular attention. These causes are of very great importance, not only from the point of view of the monetary system, but also from that of the economic system as a whole. It is these movements which tend to secure an automatic character to the working of the gold standard system. They tend to readjust not only internal and international monetary discrepancies, but also abnormal economic currents which threaten the equilibrium of economic life. As these movements are due to an appreciation or depreciation of the exchanges beyond their gold points, they may be brought about by any cause affecting exchanges to a sufficient extent. It is not within the scope of the present book to examine in detail the causes of exchange fluctuations. We propose, however, to indicate below the main causes which, through their influence on the exchange rates, tend to result in gold movements.

(1) A rise or fall of the price level, independently of the tendencies of the world price level.

(2) Deficit or surplus in the trade balance.

(3) Superabundance or scarcity of means of payment.

(4) International movements of funds.

(5) Psychological causes.

Rising prices tend to bring about a depreciation of the exchange, which again tends to result in an efflux of gold. As the volume of the means of payment is thereby diminished, the gold efflux thus caused tends to check the rising trend of prices. Similarly, a falling trend is readjusted by an influx of gold brought about by the fluctuation of exchanges. Gold movements also tend to eliminate discrepancies between price levels in various countries, as gold flows from the country with the higher price level to the country with the lower price level, causing a contraction of means of payment in the former and an expansion of means of payment in the latter.

Gold movements caused by exchange movements also tend to balance any surplus or deficit in the foreign trade of a country. This aspect of their function was generally misunderstood or at least exaggerated before the war. It is a commonplace of pre-war text-books on economics that gold is imported or exported in order to balance the discrepancy between the debit and credit side of the trade balance. This theory, in its primitive and superficial form, has been contradicted by facts innumerable times. The mere existence of a trade deficit does not in itself necessitate an efflux of gold. It is only if the increase of the external indebtedness caused by the trade deficit takes place in circumstances which result in a depreciation of the exchange that the trade deficit tends to provoke an efflux of gold. The only cases in which a trade deficit must necessarily be met by gold exports are those of countries whose external credit is very bad. If the imports of Soviet Russia exceed its exports, it has to

cover a great part of the deficit by the sale of gold abroad, because it is unable to raise external credits. Apart from such exceptional cases, a trade deficit may or may not cause a gold efflux, according to whether it affects the exchange.

An improved and more sophisticated version of the pre-war theory states that gold movements serve the purpose of compensating the difference between the debit and credit side of the balance of payments, including both current items (import and export of goods and services) and capital items (changes in the balance of indebtedness). This, however, is a mere trusim which does not in itself provide any explanation as to the motives of gold shipments. At any given moment the balance of payments is bound to be at equilibrium, for an excess of imports of goods and services is automatically and immediately offset by a corresponding increase of the balance of external indebtedness without any gold shipments. Moreover, a gold export may be occasionally the cause and not the effect of the changes in the balance of indebtedness. It is only if and when these changes result in exchange movements beyond the gold points that they tend to bring about gold shipments.

Although discrepancies in the trade balance or changes in the balance of indebtedness are not necessarily offset by gold movements, in practice they often affect exchanges sufficiently to cause an efflux or an influx. It is the floating indebtedness which tends to affect the exchange rates and which, therefore, may become responsible for a gold efflux. The seasonal movements of foreign trade, unless offset by other factors, result in seasonal exchange movements, which again are responsible for seasonal gold movements.

In the long run, the gold stock of a country whose imports of goods and services constantly exceeds its exports of goods and services is likely to decline rather than increase, owing to the difficulties of balancing the deficit by means of long-term borrowing.

A gold efflux caused by the influence of a trade deficit on the exchanges tends to readjust the equilibrium of the exporting country, through its effect on the supply of means of payment. A reduction of the volume of currency and credit and an increase of the rates of interest through an efflux of gold tends to cause a decline in prices, while the price level of gold-importing countries tends to rise. As a result, the competitive capacity of the gold-exporting country, both in the home markets and in the foreign markets, tends to improve.

An excessive or inadequate supply of means of payment may cause gold shipments either through its effect on prices or through its effect on rates of interest. We have seen already that, if gold movements are caused by the factor of price level they tend to readjust the discrepancy between prices at home and abroad. The same automatic readjusting effect is produced if a change in the supply of means of payment brings about a gold movement through its influence on interest rates. An efflux of gold caused by the effect of low interest rates on exchange rates tends to eliminate the surplus currency and credit, while an influx caused by high interest rates tends to increase the supply of means of payment.

Over-lending and over-borrowing abroad tend to affect the exchanges and are therefore often responsible for gold movements. They also carry their own corrective, for an efflux of gold from the lending to the

borrowing country tends to raise the rate of interest in the former and tends to reduce it in the latter.

Gold shipments caused by exchange movements due to psychological or speculative factors tend to counteract those factors, as gold points provide a natural limit to their influence. If adverse psychological influences are so strong as to threaten the stability of the currency, then, of course, the efflux of gold tends to accentuate rather than attenuate the panic. So long, however, as there is reasonable hope that the monetary authorities are able to maintain the gold standard, the efflux of gold tends to strengthen confidence in exchange.

CHAPTER V

EFFECTS OF GOLD MOVEMENTS

It was explained in Chapter I. that the increased interest of the general public in gold movements since the restoration of the gold standard has been largely the result of the increase of the influence of these transactions on the financial mechanism. Most countries on a gold basis work with a narrower margin than before the war, so that the same amount of gold influx or efflux tends to produce a stronger effect than prior to 1914. Moreover, the psychological influence of gold movements also tends to be greater than in pre-war days. Finally, gold movements themselves are larger, more frequent, and less regular than before the war. Quite apart from special transactions—which are impossible to foresee—even commercial transactions do not occur with the same regularity as in pre-war years.

In the first place, gold movements tend to affect the credit situation. While under the existing monetary system the caprices of gold production tend to determine the world's aggregate monetary resources, the caprices of gold movements tend to determine the monetary resources of individual countries. Our monetary system has been subject to frequent criticisms on account of the excessive influence of gold. This is not the place to deal with the academic controversy as to the wisdom or unwisdom of the system. So long as the

system exists in its present form, gold movements will remain a prominent factor in determining the credit resources of any particular country. In fact, the shipment of gold is the only way by which the total resources of the Money Market can be affected by international operations. There is a great deal of misunderstanding as to the effect of foreign loans, credits, deposits, upon Money Market resources. Though these credit movements may have a strong psychological effect, they cannot produce a direct effect unless they result in gold shipments. If a foreign Government raises a loan in London, it can either spend the proceeds in this country or leave them here, or sell the sterling obtained to someone who either wishes to spend it here or leave it here. In either case the sterling amount involved may change its owners, but does not leave the country. If funds are transferred from London to New York, somebody has to buy the sterling amount offered, and the volume of monetary resources remains unchanged. If, however, the pressure on sterling exchange caused by foreign borrowing or by the transfer of funds abroad results in an efflux of gold, then—and only then—there is a decrease in total market resources. Temporary stringency may, of course, be created at the moment of the change of ownership of funds, but this does not affect total resources in the long run.

The effect of the gold efflux can be counteracted, within certain limits, by the central institution's operations in the market. If the Bank of England buys bills or securities to an amount equivalent to the gold efflux, then the immediate material effect of the efflux is neutralised. If, on the other hand, it sells bills or securities to an amount equal to a gold influx, then it can prevent the movement from bringing about an

expansion of credit resources. It cannot go too far, however, in either direction. The change in the note reserve in the Banking Department, if it assumes abnormal dimensions, would compel a change in the Bank Rate. An efflux of gold affects the Money Market through its psychological influence, even if its material influence is neutralised by the Bank's intervention. Similarly, an influx of gold creates optimism in the Money Market even if the Bank counteracts its direct effect by means of selling bills or securities.

A striking example of the Bank's power to counteract the effect of unwanted gold movements upon the Money Market was provided by the case of the Midland Bank's gold imports in 1928. The object of these shipments was to enlarge the basis of credit. They succeeded in bringing about an immediate increase of market resources, but the victory was short-lived, as the Bank of England, disapproving of an expansion of credit—which was contrary to the official monetary policy—sterilised the gold influx within a few weeks by the sale of bills. In doing so, it had to reduce its earning assets, which was contrary to its own business interests. Had the gold imports assumed much larger dimensions, a stage would have been reached beyond which the Bank would have been unwilling to proceed in its tactics. To assist the authorities in dealing with such situations, the Currency and Bank Notes Act of 1928 has conferred on the Bank of England an additional weapon to counteract the effect of gold movements upon the Money Market. This weapon consists in the right to reduce or increase the amount of the fiduciary issue. Thus an inopportune influx of gold can be sterilised by decreasing the fiduciary issue, thus avoiding any sacrifice of part of the Bank's profits through a reduc-

tion of earning assets. Similarly, an embarrassing efflux can be counteracted by enlarging the fiduciary issue without excessive purchases of bills. It is known, however, that those responsible for the official monetary policy are not in favour of frequent changes of the amount of the fiduciary issue, and would only resort to this weapon in extreme emergency. For this reason the Bank's capacity to counteract the effect of gold movements without changing the Bank Rate remains comparatively restricted in practice, although it appears that the authorities are prepared to witness appreciable fluctuations in the reserve ratio.

Gold movements tend to affect the Foreign Exchange Market, the market for gilt-edged securities and other bonds with fixed interest, as well as the Stock Exchange in general, mainly through their effect upon the Money Market.

The effect of gold movements upon the rates of interest in both importing and exporting countries tends to influence the exchange rate. The shipment of gold from London to New York tends to raise money rates in London and to lower them in New York. As a result, funds will tend to flow from New York to London, which will create an additional demand for sterling, and this, in turn, will tend to affect the exchange rate. Higher money rates in London will discourage foreign borrowing and will tend to relieve the pressure upon sterling due to that factor. Moreover, higher money rates tend to lower the price of arbitrage securities bearing fixed interest, and the resulting efflux of bonds is yet another factor tending to affect the exchange. This factor is at present of little importance, as there are only a few securities with fixed interest which possess a good international market. It appears

probable, however, that the importance of this factor will increase within the next few years. According to an extreme theory, arbitrage in such securities will reach such dimensions as to replace completely, or at least largely, gold movements as a means of the settlement of temporary discrepancies in the international balance of trade. This view may be an exaggeration, but it is not altogether unjustified. Last, but not least, the rise of interest rates caused by the efflux of gold tends to bring about a decline of commodity prices, which, in turn, tends to stimulate exports and discourage imports, and contributes to affect the exchange rate. Similarly, the influx of gold tends to result in an increase of prices and an unfavourable change in the trade balance.

In addition to the effect produced through their influence on interest rates, gold movements tend to influence exchange rates also by other means. They have a direct effect upon the Foreign Exchange Market through the foreign exchange operations which are made necessary or superfluous, as the case may be, in consequence of the purchase or sale of gold. If the shipment is a pure arbitrage transaction it gives rise to foreign exchange operations, while if it is an exchange transaction (for this distinction, see Chapter II.) it takes the place of foreign exchange operations which would have been carried out otherwise. In both cases the shipment tends to influence exchange rates, either in a positive or in a negative sense.

While the demand created by the purchase of gold on foreign account may affect the spot exchange rate to a moderate extent only, the covering operation that accompanies it in most cases tends to have a comparatively substantial effect upon the rate of forward ex-

change. Before the war the transaction was covered by means of buying sight drafts. If gold shipped from London to New York was financed in London, the exchange risk was covered by means of selling a sight draft on New York, which was sent on the same boat as the gold, and was presented for payment simultaneously with the collection of the proceeds of the sale of gold. There was no difficulty in getting a fair exchange rate for the sight draft, as there was always a good market in them on mail days, and even large amounts could easily be absorbed without unduly disturbing the exchange rate.

The situation in this respect has undergone a considerable change since the war. The great bulk of foreign exchange business is now transacted through telegraphic transfers, and an active market has been created for forward exchange transactions. Gold shipments are no longer covered, as a rule, by means of sight drafts, but by forward exchange operations. If the shipment is financed in London, the exchange risk is covered by means of selling eight days' forward dollars. Although the market in forward dollars is a good one, it is not always easy to sell a large amount for one particular day without affecting the rate for that day to some extent, especially if the Foreign Exchange Market anticipates the impending gold transaction and is aware of the necessity of selling large amounts for one particular day. It will then expect to obtain a very favourable rate. There is, of course, a possibility of covering the forward exchange by purchases in a number of markets, in which case, however, an additional turn has to be added to the cost of the operation. It is also possible to make the covering transaction in advance and to spread the

purchase over several days. In that case, however, a certain amount of risk is involved, unless the spot sterling is also bought in advance, which may or may not be desirable. In the case of the dollar, the difficulties caused by the development of a forward exchange market are comparatively moderate, because the market in forward dollars is very good. In the case of exchanges, however, which have a very inadequate forward market—such as the Canadian dollar—the difference arising from this factor is considerable. For most continental exchanges this factor does not exist, as the shipment of gold may be covered simply by means of selling spot exchange. As spot Berlin exchange, for example, is to be delivered within two days only, and the gold transaction also takes approximately two days, the sale of spot exchange covers the exchange risk. In the case of countries at a longer distance, however, the discount or premium of forward exchange is an important consideration in determining the gold points. Often when the spot rate is evidently beyond the gold point no arbitrage shipments can be made, for the theoretical profit is more than absorbed by the cost of the forward operation. From this point of view, those who wish to ship gold as an exchange transaction, instead of a foreign exchange operation which they would otherwise have to make, are at an advantage as compared with those desirous to undertake the shipment as a pure arbitrage operation. The former need not cover the exchange risk, and are in a position, therefore, to ship gold before it becomes profitable to make shipments for arbitrage.

There is, of course, a possibility of evading the cost of forward operation by means of financing the shipment in the importing country. This is often done,

but it makes no difference as to the cost of the shipment. If a shipment from London to New York is financed in the latter centre there is no need, of course, for a forward exchange transaction, as the proceeds of the sale of the gold may be used for the repayment of the dollar credit. Little advantage is gained, however, by this method. As a rule, gold is shipped from a centre with a lower rate of interest to a centre with a higher rate of interest. As the rate of forward exchange tends to represent the difference between the rates of interest in the two centres it is a matter of indifference whether the shipment is financed in the exporting centre or in the importing centre. Admittedly, the forward rates are subject to influences other than the difference between the rates of interest. In some cases it may be more advantageous to finance the gold shipment in one of the two centres. In theory, however, it may be said that loss of interest through financing the shipment in the exporting country plus the cost of the forward operation is equal to the loss of interest through financing the shipment in the importing country.

There is also the possibility of escaping the cost of forward operation by leaving the exchange risk uncovered. This is not often done, as the chances are that gold shipments will cause a reaction in the exchange, to the detriment of the shipper who attempts to combine gold arbitrage with foreign exchange speculation.

Gold movements tend to affect exchange rates also through their psychological influence. This factor is all the stronger at present, as the exact gold point is not known, and it is only actual shipments that indicate if and when the gold point has been reached. If gold is shipped to London from New York it usually indicates

that the sterling-dollar rate has reached the point beyond which it cannot rise. As a result, there will be profit-taking in sterling; it also becomes worth while to buy dollars, either for speculative or for genuine commercial purposes, for they cannot depreciate any further, and there is a fair scope for their appreciation. Thus the shipment of gold from New York is regarded as a signal to buy dollars; these purchases tend to provoke a reaction in the exchange rate.

The effect of the fluctuation of money rates caused by gold shipments upon the market for fixed interest-bearing securities is too well known to require any detailed explanation. Occasionally, gold movements affect stock prices even before they have produced any effect upon rates of interest. Thus, discount rates, having been pegged for some time in 1927 and 1928, were unaffected by gold movements, but this did not prevent gold movements from influencing the gilt-edged market.

The effect of gold movements upon the share market, though less direct and systematic than their effect upon the bond market, is far from negligible. The prospects of a higher or a lower Bank Rate cannot be ignored in any forecast of the trend of the business situation. A reduction of the Bank Rate may result in an all-round stimulus to production, and the anticipation of improving trade would naturally result in a rise in the market for industrial shares. A higher Bank Rate, on the other hand, tends to produce the opposite effect on trade. It may force the liquidation of stocks at a loss, and would result in a decline of prices and profits. Industrial shares naturally tend to suffer if an efflux of gold threatens to provoke an increase of the Bank Rate.

In certain special circumstances the effect of gold movements upon the Stock Exchange is rather pronounced. For example, Wall Street is sensitive to gold movements which tend to affect the credit situation and the volume of brokers' loans. Several gold shipments from London to New York have been undertaken with the object of stimulating a bull movement on the American stock market.

CHAPTER VI

GOLD POINTS

It is a common but superficial conception to regard gold points as something essentially stable, bearing a fixed relation to mint parities. In reality, even before the war, when the factors determining the gold points were more settled than at present, gold points were subject to changes. Though before 1914 alterations in freight rates for gold were not so frequent as now, the development of transport and the general trend of freight rates did not leave them unaffected. Nor did they escape the influence of local and temporary factors. The rate of interest was naturally an unstable factor, while insurance rates were also subject to alteration. The only items in the cost of gold shipment which remained unchanged for very long periods were the cost of packing and assay, representing a very small fraction of the total cost.

Apart from changes in the cost of gold shipment from time to time, gold points were not necessarily fixed figures even at any given moment. Freight rates were lower for the shipment of large quantities, while insurance rates tended to be higher if a large quantity was shipped on one particular boat. There was, moreover, a difference between the point at which it became profitable to ship gold by banks with offices in both centres concerned, by those having to pay com-

mission on one side, and those having to pay a commission on both sides.

In spite of this relativity and changeability of the cost of gold shipments before the war, cambists and arbitrageurs had a fairly accurate idea as to the figures of the gold points. Substantial and unexpected changes were exceptional; it was possible to work on the basis of the same figures, with minor adjustments and modifications, for long periods. There were, of course, factors which upset their calculations from time to time. For example, when certain central banks were anxious to accumulate gold they granted loans free of interest for the purpose of financing gold imports. In such cases, gold was being shipped even though the exchange was within its theoretical gold points. On the whole, however, there were few unknown factors, and the calculation of gold points was considered as more or less a matter of routine.

Since the war the situation has undergone a fundamental change. As Dr. Vissering pointed out in his presidential address to the shareholders of the Netherlands Bank in 1927, it has become almost impossible to ascertain the point at which gold should normally begin to leave the country. The factors determining that point have become entirely uncertain and subject to changes. Even the price at which central banks buy and sell gold is subject to more frequent alteration than before the war. For example, the Reichsbank, the Bank of France, and the Netherlands Bank have changed their official buying price for gold since they returned to a gold basis. Freight rates have also become a rather unstable item. Before the war the freight charged between London and New York was for many years $\frac{3}{16}$ per cent. Soon after the restoration

of the gold standard in this country, it was raised to 5s. per £100. From this figure it was gradually reduced to 3s. For some time the Compagnie Générale Transatlantique was competing with the other Atlantic lines, and was cutting the freight rate for gold. Eventually it joined the freight pool, so that, for the time being, the London-New York freight rate seems to have become stable. The New York-London freight rate remained at 5s. for a long time after the London-New York freight rate was reduced, though practically no shipments were made at that rate. Eventually the rate of 3s. has been adopted, but only for shipments exceeding $1,000,000.

Freight rates between London and the Continent are highly unstable, largely owing to competition. The development of aviation has brought about some changes in the gold points of continental exchanges, through affecting the three principal factors of gold points, viz. freight, insurance, and interest. The extent of these changes has been comparatively moderate up to the present, but they may foreshadow greater ones. Wherever there is direct air service between two gold markets, the aeroplane has a fair chance of competing successfully with the boat. There is, indeed, keen competition between air lines and shipping companies, as a result of which freight rates for gold have been substantially reduced in certain cases. The air service is particularly at an advantage with regard to the transport of comparatively small amounts, as shipping costs are in inverse proportion to the quantity of any single transport, while the cost of air transport is practically the same for small and large amounts. Thus, apart from a general reduction of the cost of gold transport, the adoption of the aeroplane

as a means for gold transport tends to encourage the movement of comparatively small sums. This, in turn, will make gold arbitrage possible for smaller firms which could not hitherto afford it. Before the war the transport of large amounts became profitable while the transport of small quantities was still unprofitable, and the operations of wholesale arbitrageurs usually readjusted the exchange before the retail arbitrageurs had a chance to operate. At present, under certain conditions, the dispatch of gold in small quantities by aeroplanes may become profitable before its transport by ship in large quantities shows a profit. An example to illustrate this development was the export of large quantities of gold to Spain during the summer of 1926 and early in 1927, mostly in sums of between £10,000 and £50,000. The transactions were the result of the discrepancy between the peseta exchange and the premium on gold for customs duties, fixed by the Spanish authorities often slightly above the actual market premium. But for the possibility of transport by air, small arbitrageurs may not have had a chance to take advantage of the discrepancy, which would have only justified the shipment of large quantities by boat. The "democratisation" of gold arbitrage is unquestionably an interesting development, the importance of which is likely to increase with the progress of aviation.

One of the unknown factors is the figure of incidental expenses, which is rather high in New York. If the Federal Reserve Bank is desirous to be relieved of part of its surplus gold it encourages shipments the object of which it approves, through delivering the gold free on board, thereby eliminating incidental costs. As this is entirely at the discretion of the Federal

Reserve Bank, it constitutes an uncertain item which cannot be budgeted for.

As to insurance rates, there are no fundamental changes as compared with the pre-war situation, as far as transport by sea and rail is concerned. The insurance rates on air transport have been somewhat unsteady, and have not yet settled at a stable level. Contrary to what appears to be obvious at first sight, insurance rates are not higher for transport by air than for transport by boat. In certain circumstances they are even somewhat lower. In the early days of the transport of gold by air, insurance companies charged higher rates, in the absence of any statistical records. Subsequently, however, they realised that the risk was not so great as they believed. Especially, the risk of a partial loss by pilferage is much smaller than for transport by boat and train. On the other hand, the maximum limit of the amount insured on any particular aeroplane or on any particular day is comparatively low, which tends to restrict the transport of gold by air.

Interest charges have been subject to more frequent and wider changes than before the war, owing to the instability of money rates and the changes in the time of transport. The first cause is, to a certain extent, temporary, as there is every reason to hope that monetary conditions will sooner or later become as stable as before the war. The time of transport tends to decline with the improvement of the means of communication. Some of the fast steamers take only five days to cross the Atlantic instead of six, and there is a possibility of further improvement, which would reduce the loss of interest for long-distance shipments.

The time factor plays an important part in the

choice between transport of gold by air or by sea and rail, not only because of the loss of interest involved, but also because gold is sometimes required urgently, so that the interested parties are prepared to pay even higher transport costs in order to get the consignment more quickly to its destination.

From the point of view of time, transport by air is at an incontestable advantage as far as Western European centres, such as Amsterdam and Paris, are concerned, with which there is a direct air service without interruption. Admittedly the difference is only a few hours, but in the case of Amsterdam this makes a difference of one day's interest, because the Netherlands Bank accepts gold only up to 12.30 P.M., so that gold sent by ship, even though it arrives on the same day, cannot be sold until the next day. The situation is less favourable as far as Central and Eastern European centres are concerned. In theory, there is a saving of one or two days by air transport, but practice has proved that the connections with the aeroplanes from London—especially at Paris, but also at Amsterdam, Basle, and Berlin—leave much to be desired. While the first-class and regular services from London to the centres mentioned are reliable, the services beyond those stations are not yet organised in such a way as to be depended upon.

Another drawback to air service is that sometimes the weather interferes with it, especially in the winter. Further, on fine summer days the bookings of passengers are so heavy that freight has sometimes to be left behind for a later 'plane. Taking all this into consideration, it appears that transport by air is, on the whole, less dependable than transport by sea and rail, so that, instead of the anticipated saving of

interest, it sometimes results in an actual loss of interest. In this respect, however, an improvement of the air service will considerably modify the situation.

Further progress of aviation will accentuate its advantages and reduce its disadvantages as a means of gold transport. Air freights are likely to be substantially cheaper in the course of time, and the increasing safety of air routes will reduce insurance rates. Quicker and more frequent air service, as well as the establishment of direct routes for long distances, will result in a considerable reduction of interest charges. It is only a question of time before regular air services are run, not only between London and the more distant continental centres, but even from London to New York and to India, and from the gold-producing countries to London. The reduction of freight rates may be much more pronounced for such long distances than for the existing short routes. Saving of interest will be very considerable. On the basis of a rate of interest of 4 per cent, the saving of, say, four days' interest would represent about £186 on a transport of 100,000 fine ounces. Insurance rates would probably be very high at the beginning, but the improvement of the air service would bring them down to a normal level. The shipping companies, in order to maintain their rôle in gold transport, would have to consent to substantial reductions in the freight rate.

As a result of the successful attempts to cross the Atlantic by aeroplane, the possibility of the establishment of regular air service between London and New York, as well as other centres, is no longer a fantastic dream, though it may take many years before it becomes reality. In South Africa and the Belgian Congo aeroplanes are already being used for the transport of

gold from the mines to the principal towns, and the idea of using aeroplanes for transport to Europe is also being considered by mining companies, anxious to save interest. The establishment of frequent air mail service with India is also a question of a few years.

While the considerable reduction of interest charges through the improvement of the air transport for long distances is a development of the distant future, there is a development in another direction, as a result of which, in certain given circumstances, the loss of interest as an element in the cost of gold shipments may be eliminated altogether. It was the Midland Bank's gold imports from New York in 1928—to which reference has been made in previous chapters—that first raised the question whether it was absolutely necessary to allow for loss of interest when calculating gold points. This question did not arise in the past, as gold arbitrage was in the hands of firms which financed the transactions either by means of borrowed funds, in which case they had to pay interest, or by means of their own funds which would otherwise have earned interest. The necessity of including interest among the expenses of gold shipments was obvious in either case. If, however, a commercial bank undertakes gold shipments, the position is not altogether clear. Commercial banks have to keep in any case a large idle cash reserve. The question is whether gold floating on the Atlantic may be regarded as part of their cash reserve on which they are not supposed to earn interest. If the answer is in the affirmative, commercial banks are justified in omitting loss of interest when calculating the cost of shipment.

The gold import point of the dollar exchange at the time of the Midland Bank's shipments (May and

June, 1928) was \$4·8877 if interest was included and \$4·8829 if it was excluded. The exchange rate at the time of the Midland Bank's shipments was around $4{\cdot}88\frac{5}{16}$. Whether the transaction resulted in a nominal profit or a comparatively substantial loss depended on the question whether gold on its way to London could be regarded as part of the Midland Bank's cash reserve. Apparently the question was answered in the affirmative, as official quarters did not object to the shipments on the ground that they were undertaken at a loss. Of course there could be no question of a refusal to buy it, as the Bank of England is under legal obligation to buy gold at the official buying price, irrespective of its origin. If, however, a bank were to import gold at a loss the Bank of England would not fail to intimate to the importer its disapproval of the unnatural transaction. No such unofficial objection was raised, which fact is of particular importance in the case quoted. Everybody knows that the Midland Bank did not undertake the shipment for the sake of the negligible profit it yielded. The real object was to bring about an expansion of the basis of credit. The influx of gold placed before the Bank of England the alternatives of either sterilising the surplus by reducing its own earning assets, or reluctantly consenting to an expansion of credit which was contrary to its policy. The shipments were therefore anything but welcome from the point of view of the monetary authorities. As, in spite of this, no attempt was made to discourage them on the ground that they were undertaken at a loss, and were therefore unnatural, it appears that the principle of disregarding loss of interest has received a tacit official sanction.

The significance of this lies in its general effect

upon gold points. There is a marked tendency, since the return to a gold basis, towards the contraction of the margin between gold points. The general adoption of the practice of disregarding loss of interest would be an important step in that direction. Until now there has been no sign indicating any intention on the part of our commercial banks to take a regular interest in gold arbitrage. As since the war our joint-stock banks have taken up several branches of activity which were outside their sphere before the war—such as acceptance business or coupon dealings, for instance—it is by no means impossible that they will also take up gold arbitrage, to increase the sphere of activity of their foreign exchange departments. Even if they do so, it is by no means certain that they would, as a general rule, disregard loss of interest. American and German commercial banks have been engaged in gold arbitrage for some time past, but they always calculated the loss of interest among the costs of gold shipments, unless they had a special reason to make the shipment. Should what is now an exception become the rule, commercial banks would assume a virtual monopoly of gold shipments, as other firms which have no big idle reserves can hardly afford to disregard the loss of interest.

In Appendix I. we give some concrete figures as to the gold import and export points of the New York, Amsterdam, Berlin, Paris, and Montreal exchanges, as well as the cost of the shipment of sovereigns to Spain. Appendix II. contains the gold points of the five aforementioned exchanges on the basis of the market price of gold. Appendix III. compares the cost of transport of gold by air and by sea.

CHAPTER VII

STATISTICS OF GOLD MOVEMENTS

Owing to the increased importance of international gold movements, it has become desirable, even more than it was before the war, that adequate statistical material should be made available for the use of the business man and the currency expert. Undoubtedly, gold statistics have reached a more advanced stage than most other financial statistics. The returns published by the Customs House and the Bank of England supply valuable material. The information thus given is, however, far from sufficient to meet requirements, and even the available statistics on gold movements have been rather neglected by economists and statisticians. While most text-books on currency contain statistical tables of the world's gold production since the discovery of America, anybody desirous of obtaining figures of international gold transactions for only a few years back has to waste time and energy in collecting for himself the material required from the official returns.

Figures concerning gold movements of most other countries are even less easily obtainable. In this respect the Statistical Department of the League of Nations has made a commendable effort to accumulate statistics. In its volume on trade balances it publishes figures of the imports and exports of gold for almost

every country since 1911. Unfortunately, however, the value of gold imports and exports of most countries is given in the paper currencies of the countries concerned, so that the figures cannot be used for the purpose of comparison. It would be impossible for anybody except the authorities of the countries concerned to calculate the value of their gold movements in past years in terms of a gold currency. The method of the valuation of gold for the purpose of customs statistics is far from uniform. In some countries it is based on the weekly, monthly, or annual average price of gold, while in other countries the value of every transaction is recorded on the basis of the actual price at the time of the entry. It would be highly desirable, indeed, if the League of Nations could induce as many countries as possible to revise their gold statistics and to convert the figures into a gold currency. Should this prove to be impossible, as far as the figures of past years are concerned, it would be gratifying if current returns at least were based on a stable unit and a uniform method.

Although the statistical material on gold movements published in this country compares favourably with that of most other countries, it is far from satisfactory. The most important source of information is, of course, the returns published in the *London Gazette* twice a week by the Customs Office, containing the total imports and exports of gold declared during the days covered by the returns, as well as their specification according to countries of destination and countries of consignment. (The term "country of consignment" is used in official returns in preference to "country of origin", as the latter indicates the country where the gold was produced, which is unessential from the point

of view of international gold movements.) The monthly trade returns contain the figures of imports and exports declared during the calendar month under review, as well as the figures since the beginning of the current year. The trade returns for December contain the provisional figures for the whole year, while the revised figures appear in the annual returns published in the course of the following year. The difference between the provisional and revised figures is that the former represent the amount declared during the calendar year, while the latter represent the amount actually shipped, even if it is declared after the turn of the year.

It ought to be recognised that the Statistical Office of the Customs House takes every possible care to secure the accuracy of the figures of gold movements. The ablest clerks are usually put in charge of bullion statistics. While merchandise imports and exports are recorded with the aid of a mechanical process, gold shipments continue to be entered in handwriting in old-fashioned ledgers. This difference in treatment is due, not so much to reverence for the Golden Calf, as to the practice of recording more details for gold than for merchandise. In spite of every precaution, however, the material is not altogether reliable, as far as the date of the shipments and the specification according to countries are concerned. The weekly returns often announce shipments several weeks or even months after they have actually taken place, especially as far as exports are concerned, the supervision of which is less strict than that of imports. The means at the disposal of the authorities to penalise delay or inaccuracy in the declaration of gold movements are not sufficiently strong to enforce the regulations in every case. In certain circumstances, it is to the

interest of the shipper to maintain secrecy. In order to prevent their rivals from following their example, shippers may give the country of immediate destination as the final destination of the consignment. The fines are nominal, and it is often tempting to run the risk of being fined. (Needless to say, this does not refer to the well-established firms engaged in gold transactions.) The classification of gold exports as to countries of destination is therefore not absolutely reliable. The same holds good as to the countries of consignment, though to a less extent. The delays in declaration, which may interfere with the accuracy of the totals of weekly and monthly figures, do not influence the revised annual figures. Classification according to countries cannot, however, be regarded without reserve even in the annual volumes.

It would be highly desirable to eliminate this source of doubt, as far as possible, by means of checking these figures. To that end the gold statistics of foreign countries provide a valuable aid. It would be helpful, of course, to obtain statistics as to the insurance of gold. This is, however, impossible. The major part of the gold shipments are believed to be insured at Lloyd's, but that corporation does not publish any statistics about the activities of its members. In any case the amount insured is not necessarily identical with the amount shipped. It is a widely adopted practice to over-insure gold shipments, to the extent of about five to ten per cent. In spite of this, if it were possible for Lloyd's to collect and publish monthly or at least annual figures of the gold shipments insured with its members, many errors might be corrected.

The Customs statistics go back as far as 1852 for exports, and 1858 for imports. The annual totals of

imports and exports since their publication until the end of 1928 are given in Appendix V.

There is every reason to consider these figures as approximately reliable up to the year 1913. During and after the war, however, several circumstances interfered with the accuracy of gold statistics, so that the figures from 1914 to 1925 are of rather problematical value. While sovereigns were calculated on the basis of their face value, bar gold was calculated on the basis of its market value, which was subject to fluctuations, especially after the unpegging of the exchange. It is also doubtful whether sovereigns exported for the Army operating abroad—especially in the Near East—passed through the Customs House. The valuation of gold shipments on account of foreign Governments also gave rise to differences. For instance, in 1920 a large amount of gold which was held in London on American account for some time was shipped to the United States. When it was exported, its value was calculated on the basis of the price of gold at the time when it was imported, although the actual price prevailing in 1920 was much higher. The absence of figures for 1917, 1918, and 1919 is a very regrettable flaw in the continuity of the statistical records of gold shipments. It would be highly desirable if the authorities would publish these figures. It would be equally desirable if the figures for the whole period 1914 to 1925 were to be revised and corrected. As it is, they are misleading, and cannot be used for research into one of the most interesting chapters of war and post-war finance.

The figures of gold imports and exports duly indicate the almost uninterrupted growth of the gold stock of this country before the war. Apart from the period 1877–1886, when there was an excess of gold exports of

about £10 millions, and apart from a few isolated years, gold imports always exceeded exports. A great part of the surplus was, of course, absorbed for industrial requirements, while the rest contributed to the increase of the Bank of England's reserve and the internal circulation of sovereigns. The figures indicate a remarkable increase in the turnover of the London gold market. The total of imports and exports, which was £35 millions in 1858, exceeded £100 millions in the last pre-war year. This was, of course, largely due to the increase in the world's production of gold. In fact, the increase in the turnover of the London market did not keep pace with the increase of gold production even before the war. It will be interesting to observe the tendency in this respect over a long period, after the abnormal movements caused by the redistribution of the world's gold stock have been completed. There is little doubt that direct shipments from South Africa to India and South America have permanently reduced London's share in the physical volume of the international turnover of gold. This, however, does not mean that London's importance as the world's gold centre has suffered to the same extent. Although the gold does not reach London, it is bought and sold in this market. As to the increase of New York's importance as a gold centre, it is admittedly, in part, of a permanent nature, but it is due in part to temporary factors which will disappear once the process of the redistribution of gold surplus of the United States is completed.

No statistical data whatever are available as to whether gold shipments are commercial or special transactions, although an analysis of the statistical material on that ground is at least as important, from

both a theoretical and a practical point of view, as an analysis according to countries. The difficulties of compiling such statistics are obvious, from what has been said in Chapter II. of the problem of distinguishing between commercial and special transactions. Such data should be published, however, even if they could claim no more than approximate accuracy. It is impossible to form any judgment as to the tendencies of the international gold situation without the aid of such figures. The atmosphere of mystery with which gold transactions are surrounded makes it very difficult, however, to compile any reliable data. This is a shortcoming that ought to be remedied. Our monetary authorities would be in a better position than any other body or individual to compile these statistics, though they even are not always aware of the real motives of shipments.

The daily bullion returns of the Bank of England provide a valuable source of information, though they contain figures of purchases and sales of gold on foreign account only. Until November, 1928, they specified countries of origin and destination for sovereigns, but have since then discontinued to give information with regard to either bar gold or sovereigns. Consequently, we depend in that respect on Customs returns, foreign bank returns, private information, and often merely on inference. This is, however, no justification for neglecting the information supplied by the Bank. It is characteristic of the unsatisfactory state of statistics on international gold movements that such an obvious source of statistical material has been practically disregarded in the past. Though the annual totals of the Bank's purchases and sales of gold on foreign account can be compiled by means of the addition of the daily

figures, it is only since 1925 that such annual figures have been published. No statistics have ever been compiled to cover the pre-war period. To fill the gap to some extent, Appendix IV. gives these totals, compiled from the daily bullion returns, as from 1880. The figures for the period between July 26, 1916, and April 29, 1925, are missing, as the Bank of England suspended the publication of bullion returns in 1916 and did not resume it until after the restoration of the gold standard.

It would be interesting to compare the amount of the Bank's foreign transactions with that of its domestic transactions. There is, however, no information available as to the latter. They do not appear in the daily bullion returns; only the balance of domestic transactions can be calculated from the weekly returns and from the annual balance-sheet of the Bank, while the amount of its domestic purchases and sales is not known.

It appears from the foregoing that much remains to be done to improve the statistical information as to international gold movements. In summarising the desiderata, it is necessary to discriminate between the practical requirements of the Money Market and those of Economic Science. The former urges full and immediate information on gold movements as soon as they have taken place. The latter wants full data covering past periods. In order to meet practical requirements the following improvements may be suggested:

(1) The Customs House should publish daily returns on gold movements, instead of its present bi-weekly returns. Every shipment should be announced on the day it takes place, together with the country of destination or consignment.

(2) The powers of the Statistical Office to impose

fines on inaccurate or delayed declaration should be widened, and should be fully applied.

(3) The Bank of England should publish in its daily bullion report the countries of origin and destination for all transactions, whether domestic or foreign, whether involving bar gold or sovereigns.

(4) The Bank of England should announce on whose accounts ear-markings and releases of gold on foreign account are made. It should announce at least at the end of every year the total amount of gold held ear-marked on foreign account.

(5) The destination of gold purchases made in the open market by the so-called "Unknown Buyer" should be announced.

(6) Firms undertaking gold shipments should declare whether the shipment is commercial or non-commercial transaction.

(7) Lloyd's should compile and publish figures concerning the insurance of gold shipments concluded by its members.

All this information would be equally useful from a practical and a scientific point of view. In addition, it is to the interest of scientific research to obtain complete statistical information for the past, which is of little immediate practical use to the City man, but which is extremely valuable for research and for its bearing on monetary policy. To meet these requirements, the following improvements may be suggested in addition to those enumerated above:

(1) The figures for the years 1917, 1918, and 1919 should be published.

(2) The existing figures for the other war and post-war years should be revised and corrected as far as possible.

(3) The Bank of England should publish the figures of its gold transactions for the period 1916–1925.

(4) The Bank of England should publish its annual totals of gold transactions on foreign account since the first establishment of the gold standard.

(5) The Bank of England should publish the annual amount of domestic gold transactions since the first establishment of the gold standard.

(6) The League of Nations should bring pressure to bear on its members to improve their statistical service concerning gold movements, and to complete and correct their statistical material for past years.

(7) The League of Nations should collect detailed information from foreign central banks as to their gold transactions.

It is, indeed, highly desirable to dispel the atmosphere of mystery which at present surrounds the gold market, and which, in the opinion of most experts, is at least superfluous, and is very often decidedly harmful. A well-known argument against publicity is that secrecy is one of the essential advantages of the London gold market, and that its elimination would strengthen the rival gold centres to the detriment of London. This argument is, however, anything but convincing. The chief rival, New York, publishes more details than London, and in some respects, even more details than those contained in the above desiderata. It publishes the name of the shipper, and very often the name of the recipient of the gold, which is in most cases superfluous. In any case, gold is bought and sold in the most favourable market; it is hardly likely that anyone would pay more or accept less for gold, merely in order to keep the transaction secret. In the great majority of cases, foreign customers themselves

do not desire secrecy; they take the first opportunity to disclose the transactions. It would be comparatively easy to arrive at an agreement that the same rules as to the publicity of gold movements should be observed in every gold market.

As the monetary situation depends to a very great extent upon the movements of gold, the public is certainly entitled to the fullest possible information about these movements. As they affect, through the Money Market, producer and consumer alike, they are a matter of considerable public interest, and should not be treated as the business secrets of private firms. If the present policy of secretiveness is maintained, it is likely to strengthen the movement against the gold standard, which is certainly the last thing those responsible for that policy would desire.

CHAPTER VIII

THE POST-WAR GOLD STANDARD

As we pointed out in Chapter I., the meaning, scope, limitations, and interpretation of the gold standard, and the spirit in which it is applied, are not the same as they were before the war. Currency legislation has been changed in every country, but the unwritten laws which also play a very important part in the application of monetary systems have not yet had time to become crystallised. It is already obvious, however, that they are substantially different from those ruling in pre-war days. In the course of the experience of the last three years, several new principles have been adopted. Some of them have been embodied in currency legislation, while others exist only in practice. Time alone will tell whether any of these principles will survive the transitional period we are at present experiencing.

It is only natural that, after the greatest financial upheaval in history, the readjustment of monetary conditions should require a number of years. The preliminary condition of the smooth working of the gold standard is economic, financial, and psychological equilibrium. Most countries which returned to gold had not reached a sufficiently advanced stage of progress towards this equilibrium. Apart altogether from the situation of individual countries, international factors over which no single country has control have also

added to the risk attached to the return to the gold standard during the period 1925–1928. From a scientific point of view the restoration of the gold standard in most countries was decidedly premature. In spite of this, the courageous act of those responsible for the currency reforms was justified, for the act of legal stabilisation has itself contributed to a very great extent to create economic, financial, and psychological conditions which make the normal working of the system possible. The alternative solution would have been to wait until production and international trade had found their new level, and budgets, international debt, capital market, and international balance of payments, had once more become normal, and public confidence had once more been restored. For most countries this would have taken a great number of years if an inconvertible paper basis had been maintained. As it is, their bold gesture in returning to gold in spite of unsettled conditions has brought them much nearer to equilibrium. If a given country had waited until conditions provided a scientific justification for its return to gold, it might not have legally stabilised its currency until, say, 1935. As it is, it may reach the same stage of equilibrium by, say, 1930 or 1931. The chances of a favourable result have made it worth while to take some risk. None of the countries which have adopted the gold standard since 1925 has had to abandon it, and this fact is held to justify their action.

It is understandable, however, that in the circumstances the post-war gold standard has been rather fragile in some countries during the first few years of its application. It has been a delicate hothouse plant, needing very gentle and considerate handling. If it

were exposed to the elements before it had time to gather sufficient strength, it would be doomed to perish. To have yielded to the demands of doctrinairism would have been fatal. Undoubtedly, the ideal state of affairs is to let the gold standard take care of itself, for its principal advantage lies in the automatic nature of its working. In theory, an efflux of gold should not give rise to any uneasiness, for it would tend to bring about its corrective by its effect upon Money Market, Foreign Exchange Market, Stock Market, and price levels. In practice, an excessive rise in money rates on account of a heavy gold efflux would provoke a wave of indignation among the public, which would end in the abolition of the gold standard. Thus those who insist upon the full application of the principle of *laissez-faire* to the gold standard are a greater danger to the system than the adherents of a managed currency.

It has been necessary for every country—with the exception of the United States—to admit certain restrictions upon the full application of the gold standard. Sweden, the first European country to return to gold after the war, considered it advisable to maintain the restriction upon the import of gold, so as to avoid a repetition of the inflation caused during the war by an unwanted gold influx. All other countries were willing to run that risk, but considered it necessary to defend themselves against the menace of an excessive gold efflux. To that end a number of countries—among others, Holland and Denmark—have adopted the principle of reciprocity as to gold exports. They raise no obstacle to the export of gold to countries on a gold basis, but the export to countries where there is no free gold market remains prohibited. This rule

may be contrary to the principles of a pure gold standard, but necessity justifies it. It protects small countries from being deprived of their gold reserve by their bigger neighbours who can afford to buy their stocks at a loss. Even larger countries should benefit by it, though they may consider its application as a sign of weakness. From a general point of view, it provides an additional inducement for the return to a gold basis, as it draws attention to the inferior position of countries with an inconvertible currency. It is, indeed, hardly fair that countries which have no immediate intention of returning to the gold standard should hoard large amounts of gold, withdrawing it from the countries which are in active need of it. Discriminatory measures against such countries are, therefore, justified. It would be desirable if the principle of reciprocity were to be adopted by every country. Only countries with a definite scheme of restoring the gold standard in the near future should be allowed to buy gold before they are actually on a gold basis.

Unfortunately, the practical application of the principle meets with difficulties. The gold purchased in a country whose gold standard is based on reciprocity may be deposited in a country with a free gold market, on account of a country with an inconvertible paper currency. It is believed that such action was actually taken by France in 1927, when gold purchases from Holland were deposited in New York. If reciprocity were adopted as a general practice, means could also be found to prevent the circumvention of the principle. At present, however, even the countries which have adopted the principle occasionally find it advantageous to disregard it. For instance,

the Danish National Bank exported gold to Germany, notwithstanding the fact that the export of gold from Germany was still prohibited, simply because the exchange situation made it desirable to sell the gold there in preference to selling it to countries on a gold basis.

The significance of the principle of reciprocity tends to diminish with the increase of the number of countries on an actual gold basis. Possibly it may survive even after every modern country has returned to the gold standard, in the shape of an embargo on gold exports to countries which, though legally on a gold basis, prevent in practice the export of gold by artificial means.

Another important principle which has been established as a result of the experience of the last few years is that of the non-interference of central banks with each other's gold reserves. This principle, to which reference has already been made in previous chapters in connection with recent French and German gold purchases, is not generally adopted, any more than the principle of reciprocity. Unlike the latter, it is not embodied in any currency legislation. The main object of the co-operation of central banks is to secure its general adoption, so as to prevent a reckless scramble for gold, with all its undesirable consequences on price level and on international monetary stability. According to this principle, monetary authorities should not take the initiative in the purchase of gold from other central banks unless their action is approved by the central banks whose reserve is thereby diminished. Orthodox adherents of the gold standard criticise this rule on the same ground as that of reciprocity, for both aim at restricting the free working

of the gold standard. In their opinion, once the convertibility of notes and the freedom of gold exports is declared, foreign monetary authorities have the same right as private individuals or firms to avail themselves of this freedom. Doubtless, from a legal point of view, discrimination is out of place. It has been realised, however, that unless some kind of restriction is placed upon the demand of monetary authorities, the pressure upon the gold reserves of the few countries giving a literal interpretation to the freedom of the gold market might become unbearable. It would be likely to lead to the suspension of the gold standard in some countries, which would cause a general setback to international monetary reconstruction, and would be contrary to the interests of the purchasing countries themselves.

The question is whether to sacrifice the doctrine of *laissez-faire* or the prospects of international financial reconstruction. Fortunately, common sense has prevailed over doctrinairism. It has been agreed that the post-war gold standard has not been established for the purpose of giving central banks a free hand to satisfy their needs at each other's expense, but for the purpose of supplying gold for normal commercial requirements. It is in order to secure the continuity of facilities for the benefit of commercial requirements that the principle of non-interference has been admitted.

The simplest way to enforce the principle would be to embody it in the monetary legislation of countries on a gold basis. Most countries would be reluctant, however, to do so, because it is regarded as an admission of weakness. This difficulty could be overcome if an international understanding could be reached to include it in the monetary laws of all countries on a

gold basis, weak and strong alike. It would be a temporary measure, which could be abolished in a few years, when the redistribution of gold is completed and the scramble for the metal is over. As it would be difficult to arrive at such an international understanding, there exist other means of achieving the same result, such as the co-operation of central banks reinforced by moral pressure against the disturber of the peace. Although the movement of co-operation has made good progress its results are far from satisfactory. There are still central banks which, directly or indirectly, violate the letter or the spirit of the principle of non-interference. The main reason for this is that moral pressure has not been enlisted to a sufficient extent to enforce its strict observance. The movement of co-operation of central banks works in accordance with the old-fashioned methods of secret diplomacy, behind closed doors, with a complete exclusion of publicity. At the conferences which are held from time to time, only the principal central banks are represented, while contact with the smaller central banks is maintained by occasional visits. No official announcement has ever been made as to the agreements reached. Secrecy is carried so far as to prevent the central banks from reaping the moral benefit of their willingness to co-operate. For instance, the Press criticisms directed against the Bank of France in 1927 when it embarrassed the market by its gold purchases continued long after it had agreed at Washington to discontinue these purchases. It was not until some months afterwards that the fact that an understanding had been reached was unofficially disclosed. This method is hardly calculated to encourage the spirit of co-operation among central

banks. The strength of the moral pressure against the disturbers of the peace could be multiplied by enlisting the support of Press and public opinion in favour of the loyal banks and against the disloyal ones. If the League of Nations were to use the same secretive methods as central banks it would be of little use to the cause of peace. It could do very little to prevent a war without making use of its principal weapon, *i.e.* its influence upon international public opinion.

In the complete absence of publicity, the man in the street is ignorant of the principles which govern central banking co-operation, and is not in a position to support the movement by condemning the action of those who jeopardise its success. What is required is a public international conference at which the claims of central banks to increase of their gold reserve could be examined by an impartial body of experts who would elaborate a scheme regulating the demand. Although the decisions of such a conference would not be enforceable any more than are the decisions of the League, most central banks would hesitate to irritate international public opinion by disregarding them. The same conference should attempt to codify the rules under which the post-war gold standard works. If it were impossible to obtain the consent of all countries to embody in their currency legislation the necessary restrictions to the free working of gold standard it would at least be possible to reinforce the principles involved by the endorsement of an international body of experts. It should be made clear that the refusal of a central bank to part with an unreasonably large amount of gold intended to be withdrawn by a foreign central bank without regard to the ex-

change situation, should not be regarded as a suspension of the gold standard. From a scientific point of view such a modification of the system of gold standard in practice may not appear to be ideal, but necessity justifies it. After all, if the letter of the law were to be strictly applied and every monetary authority that insisted on meeting its requirements at the expense of some other central bank were to get its pound of flesh, it would soon become difficult to meet commercial demand, and the gold standard would have to be suspended altogether. It is better to maintain a restricted but safely established gold standard rather than an unrestricted one with the prospects of its early suspension.

Other principles of the post-war system of gold standard are the abolition of the use of gold coins and the restriction of the domestic use of gold. The former is almost generally admitted. Although before the war it was difficult to imagine a gold standard without coins the conception has changed to such an extent that to-day even orthodox adherents of the system consider coins unessential. In some countries, such, for example, as South Africa and Holland, the use of coins has been revived. This is understandable in the case of the former, which is the principal gold-producing country, but it is difficult to understand in the case of Holland, for it had practically no gold coins in circulation before the war. Its post-war experiment to introduce coins aimed mainly at reducing the idle reserves of the Netherlands Bank by the creation of a secondary reserve in the shape of gold held by the public. As most coins were exported, however, the experiment has been practically discontinued. The trend of modern development points

towards the complete abandonment of coins as means of payment in modern countries. The restriction upon the internal use of gold, with a view to preventing banks from creating gold reserves of their own, is also a modern tendency of a lasting nature. Though both changes are the result of the temporary shortage of gold, they are likely to survive the shortage, as they are in accordance with the tendency towards a more scientific monetary system. Possibly within a decade the international circulation of gold will be more free than even before the war. It is most unlikely, however, that its internal circulation will ever regain its pre-war vogue.

The frequency and importance of special transactions since the war have made it desirable for monetary authorities to discriminate as to the motives of gold shipments. Before the war, when gold movements were due mostly to natural causes, they had the advantage of drawing the attention of monetary authorities to the existence of unsound monetary or economic tendencies. In addition to the automatic correction of these tendencies by the gold movements themselves, the monetary authorities were thus enabled to take steps to counteract undesirable currents. All they had to do was to protect their gold reserve against an undue reduction or increase. In fighting against factors tending to deplete their gold stock or to increase it beyond necessity they tended to readjust any deviation of economic life from its normal course.

The situation has undergone a considerable change since the war. A great part of gold movements is no longer the natural outcome of economic tendencies but the result of arbitrary human decision, often in defiance of natural tendencies. This necessitates a re-

consideration of the attitude of monetary authorities towards gold movements. It is desirable to discriminate between natural and unnatural transactions. The former are the outcome of undesirable economic tendencies, so that, in endeavouring to protect its reserves, the central bank tends to counteract these undesirable tendencies. The latter are completely independent of any economic currents. In endeavouring to check them, the central bank does not in any way pursue the end of protecting economic life from disturbing influences. On the contrary, the measures taken for the protection of the gold reserve may themselves disturb economic equilibrium, in addition to the unfavourable influence of the gold movements. Thus in the case of gold movements through special transactions—or through exchange transactions brought about in abnormal circumstances—the task of the defence of the gold reserve is no longer identical with that of the regulation of economic life. The protection of the gold reserve in that case becomes, not a means to an end, but an end itself which requires considerable sacrifices.

It is only if gold movements are caused by economic factors that they should be counteracted by changes in the Bank Rate. If they are caused by factors independent of economic tendencies, then the task of the authorities should be confined to neutralising the effect of the efflux on trade. Thus if abnormal factors are responsible for a decline of the gold reserve, it is a mistake to counteract it in face of depressed trade, declining prices, and an abundance of money. If in such cases the monetary authorities have to choose between protecting their reserve and protecting the economic interests of the country, they ought to choose the latter

alternative. In order to avert an inopportune and economically unjustified increase of the Bank Rate, it is worth while to sacrifice part of the gold reserve. What is wanted in such circumstances is a liberal interpretation of the gold standard. The rigid application of its orthodox principles in spite of the changed circumstances, without discrimination as to the causes of the movement, is likely to result in a great accession to the number of those who believe that our salvation lies in the adoption of a managed currency. While it is desirable that normal gold movements should continue to be dealt with in the same way as before the war, abnormal movements, if they cannot be avoided by co-operation, should at least be prevented from unduly disturbing economic life. During a period when abnormal transactions are likely to occur frequently, a liberal interpretation of the system is essential. In view of the abnormal nature of the gold movements, the monetary authorities should not hesitate to make use of abnormal means. In the case of Great Britain, the deflationary effect of an abnormal efflux of gold can be neutralised through the application of Clause 8. of the Currency and Bank Notes Act of 1928, by virtue of which the fiduciary issue may be raised for a period not exceeding six months. The increase of the fiduciary issue would not in any way check the efflux of gold, but it would protect trade against the adverse effects of a decline of the gold stock. Contrary to what may appear to the superficial observer, an increase of the fiduciary issue does not result in an increase of the active note circulation, but merely an increase of the part of the note issue which is covered with securities instead of gold. The increase makes it superfluous to contract currency, in spite of an efflux of gold. It

would be, of course, a fatal mistake to neutralise normal gold movements by such exceptional means. It would be equally unwise, however, to attempt to check abnormal movements with the aid of the Bank Rate.

CHAPTER IX

FUTURE OF GOLD MOVEMENTS

As was stated in Chapter V., there is a tendency towards cheaper and quicker facilities for gold shipments. Improvement in the means of transport and the progress of commercial aviation tend to reduce the loss of time, while competition between different transport enterprises tends to reduce the freight rate. The mere suggestion of the establishment of an air service for gold transport from the Cape to London has induced the shipping company which has hitherto monopolised the transport of South African gold to this market to consider a downward revision of freight rate.

Apart altogether from the possibility of a further reduction of the loss of interest through speedier transport and a downward trend of money rates, there is a possibility of its complete elimination from the cost of gold shipment, if the idea of regarding gold in course of shipment as part of cash reserves should become generally adopted. Thus the chances are that the contraction of the margin between gold points will continue. At the same time, the factors responsible for gold movements, which, as was stated in Chapter I., are stronger and more numerous than before the war, are likely to remain abnormal for some time. The transfer of reparations and inter-Allied debts, the process

of readjusting the dislocated international balance of indebtedness, the redistribution of the world's gold stock, the adoption of the gold standard by new countries, the wide difference in rates of interest prevailing in particular countries, would in themselves be sufficient to increase commercial gold movements beyond their pre-war figures, even if the contraction of gold points did not provide an additional stimulus. In addition, the volume of gold shipped through special transactions is likely to remain high for some time.

In the circumstances, it is easy to understand the desire prevailing in some quarters for a reduction in the volume of gold movements, a great part of which is considered superfluous. In this respect it is necessary to discriminate between two aspects of the problem, *viz.*, the fluctuation of gold reserves and the physical displacement of gold. There is no doubt that gold movements, so far as they cause instability instead of tending to eliminate instability in economic life, are undesirable. Yet the redistribution of gold, inconvenient as it may be while it is going on, is a necessary evil, as it tends to eliminate the discrepancies between money rates in different centres. This is a natural process to which no exception can be taken, so long as it is carried through with the least possible disturbance to the international markets. What is generally objected to by many critics is the movement of gold to and from a given centre as a result of seasonal and other temporary factors. For example, gold to an amount of £6,684,840 was imported from the United States to Great Britain during 1928, while £6,602,592 was exported from Great Britain to the United States during the same year. These movements

in both directions, which offset each other completely, were due to temporary factors tending to produce their own corrective. They caused considerable fluctuations in the Bank's reserve, which is considered anything but desirable. Part of the gold shipments, it is pointed out, would not have been made at all but for the reduction of cost through disregarding loss of interest.

A characteristic example of superfluous gold movements caused by the low costs of the transaction is the movement between the United States and Canada. The margin between gold import point and gold export point is very narrow, and comparatively moderate exchange movements may result in shipments in both directions. In fact, gold is taken in both directions sometimes almost on the same day, as a result of a comparatively modest reaction in the exchange rate. It would be anything but desirable if a similar situation were to arise between a number of other countries. In the case of Canada and the United States, the frequency of gold shipments does not cause much trouble; the reserves of the United States are too large to be affected considerably by Canadian shipments in either direction, while the money market in Canada is not sufficiently developed to be affected by these changes to a great extent. While comparatively small shipments are sufficient to bring about a reaction in the Canadian exchange, much larger shipments are required to produce the same effect on the United States dollar, which has a very wide market. Should gold movements between London and New York become as frequent and irregular as those between Montreal and New York, it would have a distinctly unsettling effect upon our market.

It is true that the frequency of gold movements tends to reduce the fluctuation of exchange rates. This advantage is, however, negligible, for fluctuations between the existing gold points are too narrow to cause any harm. Their further contraction would not compensate business interests for the increased instability of the basis of credit supply. The question may be raised, therefore, whether it would be desirable if some means could be found to check the tendency towards the contraction of gold points. A special tax levied on gold shipments would possibly serve the purpose, provided that it would be adopted internationally.

Such interference with the normal working of the gold standard would have, however, considerable disadvantages. It should be remembered that, while gold movements, if caused by external influences, tend to unsettle the Money Market and economic equilibrium as a whole, in certain circumstances they have the opposite effect. As was shown in Chapter IV., they tend to correct unfavourable monetary and economic currents. Thus, while it may appear desirable to prevent abnormal gold movements, and perhaps even normal movements provoked by external causes, it is certainly not advisable to check normal gold movements artificially.

A method by which many central banks successfully endeavour to reduce gold movements is intervention in the foreign exchange market with the aid of their foreign exchange reserves. This method already existed before the war, but its application has become more general since the restoration of the gold standard. It is to be regretted that the Bank of England, having no foreign exchange department, cannot follow the example of continental central banks in this respect.

Little attention is paid, however, to this aspect of the problem of gold movements. Much more is said and written about the need for a reduction of the physical movement of gold. While in most cases when gold is actually moved from one country to another it involves a change in the reserves of the central banks involved, such changes often occur without any actual displacement of gold. In many quarters no objection is raised to the changes in reserves so long as they do not involve physical movements of gold. It is only actual shipment that is disapproved. If a foreign central bank ear-marks gold abroad for window-dressing purposes and releases it after the turn of the year, this operation is not criticised. If, however, the gold is moved backward and forward to the same end it is criticised on the ground that it involves unnecessary expenditure. It is condemned, therefore, as wasteful from a general economic point of view. To avoid such waste, arrangements have been made by several central banks to establish reserves in foreign centres, at which gold is accepted at the official buying price minus theoretical costs of the shipment to the banks' head offices, and from which gold can be bought at the official selling price plus shipping costs. Other central banks prefer the method of ear-marking and releasing gold at foreign central banks.

Some critics have even suggested the establishment of a central gold reserve which would play the part of an international clearing house for gold. Instead of paying out gold the central banks would draw upon this reserve and would accept in place of gold their own drafts upon the central reserve, or those of other member banks. Gold movements for monetary purposes would then be confined to the replenishment

of this reserve and the repatriation of a permanent surplus. Possibly the authors of the "Reparations Bank" scheme proposed by the Committee of Experts on Reparations had in mind the development of that international organisation into an international clearing house for foreign exchange transactions, which is quite feasible. It is unlikely, however, that the proposed institution is meant ever to become the keeper of an international gold reserve. Even if the difficulties caused by political and financial jealousies between nations could be overcome—which is doubtful—there would be little to be gained through the application of such a scheme. It would not diminish the fluctuations in individual gold reserves, but merely the physical movement of gold. Instead of being carried across frontiers or overseas, the metal would be moved from one vault to another, or would not move at all, and a book-keeping entry would take the place of physical movement. The adherents of this Utopian scheme of an international gold reserve to be kept in a "neutral" country recommend it on the ground that it would save superfluous expenses. If that is its only advantage —and it is difficult to discover any other—it is hardly worth the trouble to make a change, for the total expenditure involved in gold shipments all over the world is hardly more than a few hundreds of thousands of pounds per annum. A great part of this represents loss of interest, which, from the point of view of the wealth of nations, is merely a fictitious loss. The rest is earned by shipping companies, insurance companies, bullion brokers, etc., and can hardly be regarded as waste, especially as their profit is nobody's loss. The central banks themselves make a profit on gold movements, as they repurchase gold at a lower price than

they sell it. All that happens is that the surplus commercial value created by arbitrage is divided up among the interests involved. As to actual material waste, it is negligible. The amount of human labour expended on gold movements is very small, and the quantity of fuel wasted on superfluous gold movements is hardly worth measuring. In fact, owing to the small weight and volume of gold as compared with its value, it may be said that gold transported by sea and rail scarcely necessitates any extra fuel. As to transport by air, it necessitates additional aeroplanes, but this has the advantage of contributing to the development of commercial aviation. The only real material waste is the occasional loss of gold in the course of transport. This is very small, however, in proportion to the total transported; gold is usually shipped by first-class steamers, on which the risk is negligible. It appears, therefore, that the advantages of reducing the physical displacement of gold hardly compensate for the complications of the scheme, and for the difficulties it would have to overcome. On the other hand, if the proposed International Reparations Bank reduces gold movements by means of a regulation of the exchanges it would serve a very useful purpose, not because of the reduction of the physical displacement of gold, but on account of the reduction of changes in gold reserves.

Irrespective of any change in the system that may take place, a certain amount of gold will continue to be shipped. In the first place, the current gold output has to be sent to its natural markets. Gold required for industrial, commercial, and monetary uses will have to be shipped from the markets to its destination. The centre chosen for an international gold

reserve would not necessarily suit all producers and consumers, who may prefer to continue the existing arrangements. Any centre other than London would be inconvenient to the South African producers, because of the existence of a regular and fast shipping line. Thus London's position as the only unofficial open gold market would not be affected by any international scheme.

Although there has been a considerable amount of direct shipment from South Africa to India and South America during the last few years, London is and remains the principal market for South African gold. The existence of a regular weekly mail-boat service is, in itself, a guarantee of the continuity of South African gold supply in this market. The demand from other directions is intermittent, while the steady demand concentrated in London always secures a market for the surplus Cape gold which could not be sold elsewhere on more favourable terms.

There is no need, therefore, to fear any early loss of London's supremacy as the world's gold market. The existence of well-established and highly specialised firms dealing with bullion is, in itself, a considerable advantage. Possibly one day the exhaustion of South Africa's gold supply and the discovery of important goldfields in other continents for which London's geographical position is less favourable may result in a change in this respect. This is unlikely to take place, however, during the present generation. Meanwhile, London enjoys the benefit of possessing a double line of defence against fluctuations in the demand for gold. The first line of defence, represented by the gold supplied in the open market, stands the first shock before the attack reaches the second line

of defence represented by the Bank's own reserves. The efficiency of the system is one of the factors responsible for the comparative stability of the London Discount Market, and is one of the causes of London's supremacy as the world's financial centre.

APPENDIX I

GOLD POINTS OF THE PRINCIPAL EXCHANGES

THE calculation of gold points is, in theory, a matter of simple arithmetic. In practice, however, it presents a number of difficulties, many of which can only be overcome by means of direct experience gained through actual gold shipments. The changes in the factors that determine gold points and their instability, as well as the existence of unknown factors, have rendered the calculation of gold points rather difficult and unreliable. While before the war the approximate figures of the gold points of currencies on a gold basis were a matter of general knowledge, at present the number of exchanges the gold points of which is known at least approximately, is very small. Many countries which have returned to a gold basis have not announced the official buying price of gold. The selling price of gold has little practical meaning, from the point of view of international gold movements, in the case of countries which have adopted the gold exchange standard. As the only kinds of gold shipments made to and from these countries were either special transactions or purchases for industrial purposes, made without regard to gold points, arbitrageurs had no opportunity to ascertain all factors determining the gold points.

Freight rates are fairly definitely settled in certain relations, while in other relations in which there have not been many shipments since the war they are a matter of negotiations. The keen competition between air lines and shipping companies for gold shipments between London and continental centres results in frequent change of freight rates. It is useless to ask transport enterprises for the quotation of freight rates for such relations unless and until there is an actual shipment.

Insurance rates are also subject to frequent alterations. They largely depend on the quantity shipped on a single boat, which is not known in advance. Occasionally special arrangements are concluded ("floating policies") between banks and insurance companies for the insurance of a certain amount of gold if and when shipped, but in the majority of cases the rate is subject to fluctuation. The amount insured is also an item with regard to which there is no uniform rule. It is a popular habit to over-insure gold shipments to an extent of 5 to 10 per cent. While the approximate extent of over-insurance is comparatively settled for shipments to the East it varies widely according to firms as to shipments between London and New York or London and the Continent.

As to loss of interest, it was customary in pre-war textbooks to take the Bank Rate for basis. In normal circumstances, however, if the shipment is financed in London, the rate of interest is slightly under the Bank Rate, while in most other centres it is slightly over the Bank Rate. For banks possessing liquid resources to finance the shipment, it is largely a matter of individual opinion how much they want to earn on their funds thus used. It is becoming an increasingly popular method to leave out interest altogether from the calculation of the cost of shipment, and to express the profit on the transaction in terms of percentage representing the yield of the capital used for financing the shipment. For shippers possessing no idle reserve, the item of interest is determined by the rate which they are able to obtain for their funds if they use them in the Money Market. If the shipment has to be financed with the aid of borrowed funds the rate of interest is determined, of course, by the rate at which the shippers are able to borrow. The time of shipments for which the loss of interest is calculated is a factor which leaves wide scope for the difference in the temperament of arbitrageurs. If they are speculative they take the minimum time without allowing for the possibility of adverse circumstances which may delay the transport. If they are conservative, they leave a safety margin for possible delay.

There are also incidental expenses, such as the cost of transport from the central banks to the boats where such costs are

not included in the freight rate quoted, or packing when it is not done by the central banks, gratuities, and other small outlays. They can only be estimated approximately, and even the most experienced cambists are exposed to surprises in this respect.

It may be seen from the foregoing that it is impossible to make calculations of gold points which can claim to be valid for any length of time. For this reason the calculations included in this Appendix are meant to be only formulae subject to adjustment when the factors determining the gold points change. To facilitate the adjustment of the gold points thus calculated, the extent to which they are modified by the changes of their factors is also indicated.

In our calculation it is assumed that the shipment is made in the most favourable circumstances. Thus nothing is allowed for brokerage, as it is assumed that the transactions are carried out either by firms having offices in both centres, or by two firms working on joint account. The freight is calculated on the basis of the lowest quotation obtainable at the time of writing. The rate of insurance is the normal rate quoted for shipments involving no exceptional risk. The amount insured is the purchase price plus expenses, increased to the nearest round figure. The rate of interest is in every case 5 per cent (apart from the pre-war gold points of the dollar), but there are tables to indicate the modification of gold points with the change of the rate of interest. Nothing is allowed for possible abnormal delays. It is also assumed that the shipment is financed in the market where the rate of interest is lower, and that it is a genuine exchange transaction, so that there is no need for covering the exchange risk by forward exchange operations. It would be, indeed, impossible to allow for the cost of the forward exchange transaction, owing to the great variety of the possible forward rates.

The most important gold points are, of course, those of the sterling-dollar exchange. Owing to the frequency of gold shipments between London and New York, these are the best known gold points. Freight rates are now stabilised at 3s. per £100. Insurance rates are down at their pre-war figure of 9d. per £100. The buying and selling price in the United States is identical

at \$20·67183 per ounce of fine gold, while the Bank of England's buying price is 84s. 9·81818d. and its selling price is 84s. 11·45455d.

For the sake of comparison, we give below the calculation of the gold points of the dollar before the war and immediately after our return to the gold standard:

100,000 fine ounces of gold at 84s. 11·45455d.	£424,772	14	7
Freight, 3s. 9d. per £100 for £424,800 .	796	10	0
Insurance, 9d. per £100 for £428,000 .	160	10	0
Interest, 4 per cent for 8 days . .	372	8	4
Boxes and packing	16	0	0
	£426,118	2	11

100,000 ounces fine at \$20·67183 . .	\$2,067,183
Incidental charges in New York . .	150
	\$2,067,033

Gold export point of the dollar in 1913: \$4·8509.

100,000 fine ounces of gold at 84s. 11·45455d.	£424,772	14	7
Freight, 3s. 9d. per £100 for £424,800 .	796	10	0
Insurance, 1s. per £100 for £428,000 .	214	0	0
Interest, 5 per cent for 8 days . .	465	10	5
Boxes and packing	16	0	0
	£424,264	15	0

100,000 fine ounces at \$20·67183 . .	\$2,067,183
Incidental charges in New York . .	200
	\$2,066,983

Gold export point of the dollar in 1925: \$4·8491.

100,000 ounces of fine gold at \$20·67183 .	\$2,067,183·00
Freight, 3s. 9d. per £100 on \$2,068,000 .	3,877·50
Insurance, 9d. per £100 on \$2,075,000 .	778·15
Interest, 4 per cent for 8 days . .	1,812·16
Incidental expenses	150·00
	\$2,073,800·81
100,000 ounces at 84s. 9·81818d. . .	£424,090 18 2

Gold import point of the dollar in 1913: 4·89.

100,000 ounces of fine gold at $20·67183 .	$2,067,183·00
Freight, 5s. per £100	5,170·00
Insurance, 1s. per £100 . . .	1,037·53
Interest, 5 per cent for 8 days . .	2,265·20
Incidental expenses	200·00
	$2,075,855·73
100,000 ounces at 84s. 9·81818d. . .	£424,090 18 2

Gold import point of the dollar in 1925: $4·8949.

As is seen, the margin between gold points was wider immediately after the return to the gold standard than previous to its suspension. Subsequently, however, it declined considerably, and at present it is narrower than before the war. The difference is particularly striking if, in accordance with the rule adopted by some banks, interest is left out of calculation.

The following figures compare the gold points of the dollar at the end of 1928 with and without the inclusion of interest charges:

	Including Interest.	Excluding Interest.
100,000 fine ounces at 84s. 11·45455d. .	£424,772 14 7	£424,772 14 7
Freight, 3s. per £100 .	637 0 0	637 0 0
Insurance, 9d. per £100 .	160 10 0	160 10 0
Interest, 5 per cent for 8 days . . .	465 10 5	..
Boxes and packing .	16 0 0	16 0 0
	£426,052 4 2	£425,586 8 7
Gold export point .	$4·8515	$4·8564
100,000 fine ounces at $20·67183 . .	$2,067,183·00	$2,067,183·00
Freight, 3s. per £100 .	3,100·50	3,100·50
Insurance, 9d. per £100 .	778·15	778·15
Interest, 5 per cent for 8 days . . .	2,046·00	..
	$2,073,107·65	$2,071,071·65
100,000 fine ounces at 84s. 9·81818d. .	£424,090 18 2	£424,090 18 2
Gold import point .	$4·8884	$4·8835

Incidental charges in New York have been omitted, as in 1928 the Federal Reserve Bank delivered the gold free on board in New York.

A difference of 1 per cent in the rate of interest for eight days results in a difference of about $\frac{3}{32}$ c. in the gold point. The following table shows the yield of funds used for financing gold shipments, according to the exchange rate on the basis of which the shipment is made:

Gold Export.	Gold Import.	Yield.
$	$	Per cent.
$4{\cdot}85\frac{43}{64}$	$4{\cdot}88\frac{11}{32}$	Nil
$4{\cdot}85\frac{37}{64}$	$4{\cdot}88\frac{29}{64}$	1
$2{\cdot}85\frac{15}{32}$	$4{\cdot}88\frac{35}{64}$	2
$4.85\frac{23}{64}$	$4{\cdot}88\frac{41}{64}$	3
$4{\cdot}85\frac{1}{4}$	$4{\cdot}88\frac{3}{4}$	4
$4{\cdot}85\frac{9}{64}$	$4{\cdot}88\frac{27}{32}$	5
$4{\cdot}85\frac{1}{32}$	$4{\cdot}88\frac{15}{16}$	6

A difference of one day in the time of transport on the basis of an interest of 5 per cent results in a difference of $\frac{1}{16}$ c. in the gold point. Thus if a day is saved by using the French liners which do not touch Cherbourg between Plymouth or Southampton and New York, the gold import point is $4{\cdot}88\frac{25}{32}$ and the gold export point is $4{\cdot}85\frac{13}{64}$, on a 5 per cent interest basis.

A difference of 1s. per £100 in the freight or insurance rate is equivalent to a difference of about $\frac{15}{64}$ c. in the gold point. There is no reason, however, to anticipate any material change in either of these items.

The reichsmark comes next in importance to the dollar from the point of view of gold arbitrage. The official selling price of the Reichsbank is 2792 reichsmarks per kilo of fine gold. As, however, the convertibility of the reichsmark remains suspended for the time being, the gold import point calculated on the basis of this selling price is purely theoretical. On the other hand, the buying price of 2784 reichsmarks fixed by the Reichsbank is actually operative, and the gold export point

calculated on the basis of it has had ample opportunity to be tested by actual shipments.

The following is the calculation of the theoretical gold import point of the reichsmark:

1000 kilos of fine gold at 2792 . .	RM. 2,792,000
Transport, 1s. 9d. per £100 . . .	1,400
Insurance, 1s. per £100 . . .	800
Interest, 5 per cent for 3 days . .	1,148
Packing	100
	RM. 2,795,448
32,150·725 ounces at 84s. 9·81818d. . .	£136,348 6 0½
Gold import point: RM. 20·5023.	

As is known, the Reichsbank accepts the delivery of gold either in Berlin or at its Bremen, Hamburg, or Cologne branches. By this means the gold export point has been modified in favour of shipments to Germany. The extent of the difference is shown by the following calculation:

	Shipment to	
	Berlin.	Bremen.
32,150·725 ounces at 84s. 11·45455d.	£136,567 10 3	£136,567 10 3
Transport (1s. 9d. for Berlin, 1s. 4d. for Bremen) . .	119 10 6	91 1 3
Insurance (1s. for Berlin, 9d. for Bremen)	68 10 0	51 7 6
Interest, 5 per cent (3 days for Berlin, 2 days for Bremen) .	56 3 6	37 8 10
Packing and boxes . . .	5 0 0	5 0 0
	£136,816 14 3	£136,752 7 10
1000 kilos of fine gold at RM. 2784	RM. 2,784,000	
Gold export point . . .	RM. 20·3484	RM. 20·3580

Thus the difference is nearly one point, which is, in certain circumstances, capable of causing considerable gold shipments. The expenses of shipment to Cologne by air are about the same as for Bremen. Those for Hamburg are slightly higher.

A difference of 1 per cent in the rate of interest is equal to a difference of 0·0011 in the gold point for shipments to Bremen,

requiring two days, and to 0·0017 for shipments to and from Berlin, which require three days. The following table indicates the yield of the funds employed for the financing of gold shipments according to the exchange rate on the basis of which the shipments were made:

Gold Export to Bremen.	Gold Export to Berlin.	Gold Import from Berlin.	Yield per cent.
20·36⅜	20·35⅝	20·49⅜	nil
20·36¼	20·35½	20·49½	1
20·36⅛	20·35⅜	20·49¾	2
20·36	20·35¼	20·49⅞	3
20·35⅞	20·35	20·50	4
20·35¾	20·34⅞	20·50¼	5
20·35⅝	20·34⅝	20·50⅜	6

A difference of 1d. per £100 in the freight or insurance rate is equal to about 0·0008 in the rate. A difference of one day in the time of transport on the basis of an interest of 5 per cent is equal to 0·0027 in the rate.

The gold points of the Amsterdam exchange are also known with comparative accuracy, especially the gold export point, which played an important part soon after the restoration of the gold standard.

The following figures show the calculation of the gold export point:

	£	s.	d.
32,150·725 ounces fine gold at 84s. 11·45455d.	£136,567	10	3
Transport, 2400 lbs. at 8d. . . .	80	0	0
Insurance, 9d. per £100 on £137,000 .	51	7	6
Packing	5	0	0
Interest, 2 days, 5 per cent . . .	37	8	10
Interest, 14 days, 5 per cent on one-tenth of the amount	26	3	10
	£136,767	10	5
1000 kilos at Fls. 1647·50 . . .	Fls. 1,647,500		
80 assays at Fls. 3·50	280		
	Fls. 1,647,220		

Gold export point: Fls. 12·0447.

The following is the calculation of the gold import point of the Amsterdam exchange:

1000 kilos at 1653·44	Fls. 1,653,440
Transport, 2400 lbs. at 8d. per lb. . .	969
Insurance, 9d. per £100 . . .	622
Interest, 2 days, 5 per cent . . .	453
	Fls. 1,655,484
32,150·725 ounces at 84s. 9·81818d. . .	£136,348 6 0½

Gold import point: Fls. 12·1416.

Taking two days for the time of transport, a difference of 1 per cent in the rate of interest is equal to a difference of 0·0014 in the gold export point and 0·0008 in the gold import point. The following table shows the yield of funds used for the financing of gold shipments, according to the exchange rates on the basis of which the shipments were made:

Gold Export.	Gold Import.	Yield per cent.
12·05$\frac{1}{8}$	12·13$\frac{3}{4}$	Nil
12·05	12·13$\frac{7}{8}$	1
12·04$\frac{7}{8}$	12·13$\frac{15}{16}$	2
12·04$\frac{3}{4}$	12·14	3
12·04$\frac{5}{8}$	12·14$\frac{1}{16}$	4
12·04$\frac{1}{2}$	12·14$\frac{1}{8}$	5
12·04$\frac{3}{8}$	12·14$\frac{1}{4}$	6

On the basis of a rate of interest of 5 per cent, the difference of one day in the time of shipment is equal to a difference of 0·0020 in the gold points. A difference of £10 in the cost of shipment is equal to a difference of 0·0011 in the gold points.

There is an arrangement between the Java Bank and the Netherlands Bank which tended to bring about heavy gold shipments from London to Amsterdam towards the end of 1925. The Java Bank keeps a gold deposit with the Netherlands Bank, against which it is entitled to issue notes. If convenient, it accepts the delivery of gold at its Amsterdam deposit. At the

end of 1925, when the Batavia rate declined below 12, as a result of the rubber boom, gold was shipped from London to Amsterdam, though neither the Amsterdam nor the Batavia exchanges were under their gold points, which are 12·0432 and 11·96 respectively. As the Batavia exchange was, however, under the gold point of the Amsterdam exchange, it was profitable to take gold to Amsterdam and pay it into the Java Bank's deposit with the Netherlands Bank. Should the Batavia exchange depreciate beyond the gold import point of the Amsterdam exchange, then, in theory at least, it would be profitable to take gold for London from the Java Bank's Amsterdam deposit. In practice, however, the Java Bank may refuse to accept or pay out gold in Amsterdam, so that the arrangement would work in both directions only if it is convenient to the Java Bank. Thus if it does not wish to lose gold all it has to do is to refuse to sell gold from its Amsterdam reserve, in which case it would not lose gold until the Batavia rate has depreciated beyond its own gold import point, which is probably around 12·26.

Gold shipments for Canada are made in the shape of sovereigns, as these are accepted by the Receiver-General of the Dominion Treasury at their par value. Thus while bar gold would have to be delivered at the Ottawa Mint, sovereigns may be delivered in Montreal or at the port of St. John's.

There are two alternative routes by which sovereigns can be shipped to and from Canada, viz. direct to Montreal or via New York. Shipment via New York is quicker but more expensive. The saving of interest is usually more than counteracted by additional freight, insurance, and transhipment charges. The difference in the time of transport is no longer as great as before, as the direct mail-boat service between this country and Canada has improved considerably during the last few years. For shipment via New York 9 days have to be allowed, while it is safe to allow 10 days for direct shipments to and from Montreal. Commercial banks which finance the shipments out of their own reserves find it particularly advantageous to choose the direct route in spite of the loss of one day, whenever a good direct mail-boat is available. During the winter months, while

the St. Lawrence is frozen and Montreal is unapproachable by boat, the route via New York is cheaper for shipments from Canada, but it makes no difference for shipments to Canada, as the Receiver-General is prepared to accept delivery at the port of St. John's.

A point worth mentioning is that, though the Canadian dollar is equal to the United States dollar, the official parity of sterling in Canada is not 4·8665 but 4·86⅔, which means that sovereigns are bought and sold at a nominal premium amounting to nearly \$170 for £1,000,000. On the other hand, sovereigns are bought according to their weight, which may result in a loss on worn coins. For this reason the shipment of sovereigns to Canada always involves a certain amount of risk which should be borne in mind.

The following is the calculation of the gold export point of the Canadian dollar:

500,000 sovereigns	£500,000	0	0
Freight, 3s. per £100	750	0	0
Insurance, 1s. per £100	250	0	0
Interest, 5 per cent for 10 days	685	5	6
Packing, 500 boxes	25	0	0
	£501,710	5	6
500,000 sovereigns at 4·86⅔	\$2,433,333·33		
Incidental charges	200·00		
Gold export point, \$4·8497.	\$2,433,133·33		

The following is the calculation of the gold import point of the Canadian exchange:

500,000 sovereigns at \$4·86⅔	\$2,433,333·33
Freight, 3s. per £100	3,650·00
Insurance, 1s. per cent	1,216·66
Interest, 5 per cent for 10 days	3,336·07
Packing and incidental charges	325·00
Gold import point: \$4·8837.	\$2,441,861·06

A difference of 1 per cent in the rate of interest is equivalent to a difference of about $\frac{3}{32}$ c. in the gold point. The following table shows the yield of funds used for the financing of gold

shipments according to the exchange rate on the basis of which the shipment was made:

Gold Export.	Gold Import.	Yield per cent.
$4{\cdot}85\frac{7}{16}$	$4{\cdot}87\frac{29}{32}$	Nil
$4{\cdot}85\frac{11}{32}$	$4{\cdot}88$	1
$4{\cdot}85\frac{1}{4}$	$4{\cdot}88\frac{3}{32}$	2
$4{\cdot}85\frac{5}{32}$	$4{\cdot}88\frac{3}{16}$	3
$4{\cdot}85\frac{1}{16}$	$4{\cdot}88\frac{9}{32}$	4
$4{\cdot}84\frac{31}{32}$	$4{\cdot}88\frac{3}{8}$	5
$4{\cdot}84\frac{7}{8}$	$4{\cdot}88\frac{27}{32}$	6

A difference of one day in the time of transport on the basis of an interest of 5 per cent results in a difference of $\frac{1}{16}$ c. in the gold point. If a mail-boat is available between Montreal and Liverpool it is not worth while to pay extra expenses of the New York route for the sake of saving one day's interest. If, however, only a slow boat is available and the difference is four days, then it is more profitable to send the gold via New York.

As in the case of the American dollar, a difference of 1s. per £100 in the freight and insurance rate is equivalent to a difference of $\frac{15}{64}$ c. in the gold points.

Since the stabilisation of the franc, no gold has been shipped to or from France through commercial transactions, apart from small amounts bought for industrial purposes. The figures indicating the gold points of the franc are therefore purely hypothetical. The following is the calculation of the gold export point of the franc:

32,150·725 ounces fine gold at 84s. 11·45455d.	£136,567	10	0
Freight, 10½d. per £100 . . .	59	15	3
Insurance, 6d. per £100 . . .	34	3	0
Interest, 2 days, 5 per cent . .	37	8	6
Packing, 20 boxes	5	0	0
	£136,703	13	9

1000 kilos fine gold at 16,963·50 . .	Frs. 16,963,500
Minting costs 2·20 per kilo of ·9 fineness	22,222
Gold export point: Frs. 123·93.	Frs. 16,941,278

Originally the minting charge was 40 francs per kilo of ·900 fine gold, but the Bank of France reduced it to 20 francs until further notice. The charge for assay is 50 francs per bar, but a certificate from a recognised refiner, or the guarantee of a recognised bank, is accepted in lieu of assay.

The following is the calculation of the gold import point of the franc:

1000 kilos of fine gold	Frs. 16,963,500
Freight, 10½d. per £100 . . .	7,382
Insurance, 6d. per £100 . . .	4,241
Interest, 2 days, 5 per cent . . .	4,179
Incidental cost	400
	Frs. 16,979,702
32,150·725 ounces fine gold at 84s. 9·81818d.	£136,348 6 0½
Gold import point: Frs. 124·5541.	

A difference of 1 per cent in the rate of interest is equivalent to a difference of 0·0062 in the gold point. The following table shows the yield of funds used for the financing of gold shipments according to the rate of exchange:

Gold Export.	Gold Import.	Yield per cent.
123·96⅛	124·52¼	Nil
123·98½	124·52⅞	1
123·94⅞	124·53½	2
123·94¼	124·54⅛	3
123·93⅝	124·54¾	4
123·93	124·55½	5
123·92⅜	124·56	6

A difference of one day in the time of transport is equal to a difference of 1½ c. in the gold points. A difference of £10 in the cost of the shipment is equal to a difference of ¾ c. in the gold point.

Although Spain is not on a gold basis, gold has been shipped there through exchange transactions during the last few years,

as a result of the policy of the authorities to encourage the payment of customs duties in gold. The alternative method of payment is in paper pesetas, in which case a "surcharge" is added to the amount of gold pesetas payable. If the authorities want to encourage the influx of gold all they have to do is to fix the surcharge higher than the premium of gold pesetas against paper pesetas, in which case it is advantageous to discharge the payment by sovereigns, which are accepted at their par value.

The following is the calculation of the cost of the shipment of sovereigns taken by aeroplane to Paris and then by train to Irun (the frontier station) or to Barcelona:

	Irun.	Barcelona.
10,000 sovereigns . .	£10,000 0 0	£10,000 0 0
Transport (12s. 6d. for Irun, 14s. 6d. for Barcelona) .	62 10 0	72 10 0
Insurance, 1s. 3d. per cent .	6 5 0	6 5 0
Packing, incidental charges .	1 5 0	1 5 0
Interest, 5 per cent (2 days for Irun, 3 days for Barcelona) .	2 14 10	4 2 3
	£10,072 14 10	£10,084 2 3

If the premium of sterling against pesetas is lower than the official "surcharge", and if the difference exceeds 0·727 per cent, it is worth while to make the payments due at Irun for customs duties in sovereigns instead of paper pesetas. If the difference exceeds 0·841 per cent it is worth while to make also the payments due in Barcelona in sovereigns. The surcharge is altered at frequent intervals, and the peseta exchange is also subject to wide fluctuations. For this reason there is no fixed rate at which it becomes profitable to ship gold to Spain.

As was pointed out already, calculations of gold points are subject to frequent changes. The figures contained in this Appendix merely claim to serve as a guide in the calculation of the gold point which has to be made on every occasion before a shipment is undertaken. Commercial firms, and even banks desirous of shipping gold, may find it advantageous to avail themselves of the services of bullion brokers, who are in a better position than anyone else to follow closely the changes in the

factors that determine gold points. It is true that the commission of bullion brokers lowers the gold export point and raises the gold import point, and prevents shipments which would otherwise appear profitable if undertaken without the middlemen. In spite of this, it is desirable that gold shipments should be made through bullion brokers. Apart from the fact that the advice of specialised brokers tends to reduce the risk attached to gold shipments, it saves the shippers the inconvenience of having to attend to the details of the transaction.

APPENDIX II

OPEN MARKET GOLD'S IMPORT AND EXPORT POINTS

THE term gold points, as it is understood in everyday use, refers to the rates of exchange at which it becomes profitable to import or export gold to and from the central bank's gold reserve. In every country on a gold basis, apart from Great Britain, the only buying and selling price of gold for arbitrage are those fixed by the central bank. In this country, however, there is, in addition to the official buying and selling price of gold, also a market price which varies between 84s. 10d. and 84s. 11½d. There is therefore a scale of gold points, indicating the rates at which it becomes profitable to buy gold in the open market for export, or at which it becomes profitable to import gold with a view to selling it in the open market. These gold points are generally regarded as less important than those based on the Bank of England's buying and selling price, because of the limited market supply available, and because the demand at a price superior to the Bank of England's buying price is usually limited. Undoubtedly, the significance of the gold import points based on market prices is small. As there is no forward market for gold, the amount of demand in the open market and the market price is not known in advance, so that the importer runs the risk of having to sell his gold at the Bank of England's buying price. On the other hand, the significance of the gold export points of open market gold should not be underestimated. After all, it is these gold points that determine whether or not the South African gold arrivals find their way to the central institution. It is true that the amount that may be shipped to and from the Bank at any given moment is much larger than the amount that may be bought or sold in the open

market. In the long run, however, the Bank's reserve is determined to the same extent by its capacity of buying South African gold as by its capacity of defending its reserve and of attracting gold from foreign centres. For this reason, and also on account of the frequency of shipments of gold bought in the open market, we propose to give below the open market gold export points of the exchanges, the official export points of which have been indicated in Appendix I. The rate of interest is in every case 5 per cent.

Market Price.	New York.	Germany (Bremen).	Amsterdam.	Paris.	Montreal.
84s. 10d.	$4{\cdot}85\frac{25}{32}$	$20{\cdot}38\frac{3}{4}$	$12{\cdot}06\frac{1}{4}$	124·11	$4{\cdot}85\frac{19}{32}$
84s. $10\frac{1}{4}$d.	$4{\cdot}85\frac{11}{16}$	$20{\cdot}38\frac{1}{4}$	12·06	$124{\cdot}07\frac{1}{2}$	$4{\cdot}85\frac{1}{2}$
84s. $10\frac{1}{2}$d.	$4{\cdot}85\frac{37}{64}$	$20{\cdot}37\frac{3}{4}$	$12{\cdot}05\frac{3}{7}$	124·04	$4{\cdot}85\frac{13}{32}$
84s. $10\frac{3}{4}$d.	$4{\cdot}85\frac{31}{64}$	$20{\cdot}37\frac{1}{4}$	$12{\cdot}05\frac{1}{4}$	124·00	$4{\cdot}85\frac{19}{64}$
84s. 11d.	$4{\cdot}85\frac{3}{8}$	$20{\cdot}36\frac{3}{4}$	12·05	$123{\cdot}96\frac{1}{2}$	$4{\cdot}85\frac{3}{16}$
84s. $11\frac{1}{4}$d.	$4{\cdot}85\frac{17}{64}$	$20{\cdot}36\frac{1}{4}$	$12{\cdot}04\frac{3}{4}$	123·93	$4{\cdot}85\frac{5}{64}$
84s. $11\frac{1}{2}$d.	$4{\cdot}85\frac{5}{32}$	$20{\cdot}35\frac{3}{4}$	$12{\cdot}04\frac{1}{2}$	$123{\cdot}89\frac{1}{2}$	$4{\cdot}84\frac{31}{32}$

The effect of the changes in the rate of interest is the same as for the official gold points, as indicated in Appendix I. Any other changes in the calculation of the official gold points result in a corresponding modification of above table.

APPENDIX III

COST OF GOLD TRANSPORT BY AIR

As was pointed out in Chapter V., air lines proved fierce competitors of railway companies and shipping companies for gold transports to Continent. The advantage is particularly marked for small quantities, for which reason transport by air plays a comparatively more important part for gold bought by the trade.

The following figures compare the cost of gold transport by air with that of transport by sea and rail:

Rates per lb. Gross Weight

	By Air.	By Sea and/or Rail (passenger service).	
	100 lbs.	100 lbs.	200 lbs.
	s. *d.*	*s.* *d.*	*s.* *d.*
Amsterdam	0 8	0 10	0 9
Basle	1 3	2 0	1 9
Belgrade	2 4	5 0	4 4
Berlin	1 9	2 1	1 10
Berne	1 6	2 6	2 2
Brussels	0 6	1 4	1 0
Bucharest	2 9	4 6	3 9
Budapest	2 3	3 6	3 3
Copenhagen	1 7	3 3	3 0
Madrid	14 0	19 0	17 6
Marseilles	1 6	2 1	1 9
Paris	0 6	1 6	1 3
Prague	1 6	2 6	2 2
Rome	16 0	17 6	17 0
Vienna	2 0	3 0	2 9
Warsaw	2 9	4 6	3 6

APPENDIX IV

BANK OF ENGLAND'S GOLD TRANSACTIONS ON FOREIGN ACCOUNT

THE following table shows the total purchases and sales of the Bank of England on foreign account:

Year.	Purchase.	Sale.	Difference.
1881	£4,175,000	£6,515,000	−£2,340,000
1882	7,407,000	4,968,000	+ 2,439,000
1883	4,418,000	3,394,000	+ 1,014,000
1884	5,170,000	5,436,000	− 266,000
1885	6,567,000	5,969,000	+ 598,000
1886	2,923,000	6,303,000	− 3,380,000
1887	3,832,000	3,028,300	+ 803,700
1888	6,291,000	6,352,000	− 61,000
1889	7,278,000	5,126,000	+ 2,152,000
1890	13,774,500	5,669,000	+ 8,105,500
1891	11,941,000	13,515,000	− 1,574,000
1892	5,051,000	5,483,000	− 432,000
1893	6,488,000	8,552,000	− 2,064,000
1894	14,504,500	5,798,000	+ 8,706,500
1895	17,266,000	3,034,000	+14,232,000
1896	5,758,000	13,127,000	− 7,369,000
1897	4,330,000	5,390,500	− 1,060,500
1898	10,549,000	8,602,000	+ 1,947,000
1899	13,274,000	6,150,000	+ 7,124,000
1900	12,330,000	7,794,000	+ 4,536,000
1901	7,985,000	5,216,000	+ 2,769,000
1902	6,023,000	6,417,000	− 396,000
1903	6,257,000	9,284,000	− 3,027,000
1904	9,742,000	6,925,500	+ 2,816,500
1905	9,774,000	8,800,000	+ 994,000

[*Continued on next page.*

APPENDIX IV.—*continued*

Year.	Purchase.	Sale.	Difference.
1906	20,206,500	15,535,000	+ 4,671,500
1907	19,288,000	12,926,000	+ 6,362,000
1908	3,682,000	7,661,000	– 3,979,000
1909	19,165,000	11,046,000	+ 8,119,000
1910	18,550,000	14,488,000	+ 4,062,000
1911	16,501,000	8,228,000	+ 8,273,000
1912	12,996,000	9,669,500	+ 3,326,500
1913	21,690,000	7,943,000	+13,747,000
1914	58,247,000	8,027,000	+50,220,000
1915	24,269,000	43,076,000	–18,807,000
1916 [1]	19,828,000	2,360,000	+17,468,000
1925 [2]	15,362,000	26,957,000	–11,595,000
1926	23,947,000	17,676,000	+ 6,271,000
1927	25,927,000	20,654,000	+ 5,273,000
1928	35,631,000	36,953,000	– 1,322,000

[1] Up to July 16. [2] From April 29.

APPENDIX V

GOLD IMPORTS AND EXPORTS

THE following table shows the gold imports and exports of the United Kingdom since the establishment of Customs statistics:

Year.	Imports.	Exports.	Difference.
1852	..	£4,325,824	..
1853	..	12,751,778	..
1854	..	16,552,845	..
1855	..	11,847,213	..
1856	..	12,038,299	..
1857	..	15,061,500	..
1858	£22,793,126	12,567,040	+£10,226,086
1859	22,297,698	18,081,139	+ 4,216,559
1860	12,584,684	15,641,578	– 3,056,894
1861	12,163,937	11,238,372	+ 925,565
1862	19,903,704	16,011,963	+ 3,891,741
1863	19,142,665	15,303,297	+ 3,839,368
1864	16,900,951	13,279,739	+ 3,621,212
1865	14,485,570	8,493,332	+ 5,992,238
1866	23,509,641	12,742,059	+10,767,582
1867	15,800,159	7,889,030	+ 7,911,129
1868	17,136,177	12,708,308	+ 4,427,869
1869	13,770,812	8,473,699	+ 5,297,113
1870	18,806,728	10,013,521	+ 8,793,203
1871	21,618,924	20,698,275	+ 920,649
1872	18,469,442	19,748,916	– 1,279,474
1873	20,611,165	19,071,220	+ 1,539,945
1874	18,081,019	10,641,636	+ 7,439,383
1875	23,140,834	18,648,296	+ 4,492,538
1876	23,475,975	16,515,748	+ 6,959,747
1877	15,441,985	20,373,886	– 4,931,901
1878	20,871,410	14,968,507	+ 5,902,903
1879	13,368,675	17,578,818	– 4,210,143
1880	9,454,861	11,828,822	– 2,373,961
1881	9,963,006	15,498,837	– 5,535,831
1882	14,376,559	12,023,804	+ 2,352,755
1883	7,755,800	7,091,365	+ 664,435
1884	10,744,408	12,012,839	– 1,268,431
1885	13,376,561	11,930,818	+ 1,445,743
1886	13,392,256	13,783,706	– 391,450

[Continued on next page.

Appendix V.—*continued*

Year.	Imports.	Exports.	Difference.
1887	9,955,326	9,323,614	+ 631,712
1888	15,787,588	14,944,143	+ 843,445
1889	17,914,039	14,455,318	+ 3,458,721
1890	23,568,049	14,306,688	+ 9,261,361
1891	30,275,620	24,167,925	+ 6,107,705
1892	21,583,232	14,832,122	+ 6,751,110
1893	24,834,727	19,502,273	+ 5,332,459
1894	27,572,347	15,647,551	+11,924,796
1895	36,009,329	21,369,323	+14,640,006
1896	24,468,580	30,123,925	− 5,655,343
1897	30,808,858	30,808,571	+ 287
1898	43,722,960	36,590,050	+ 7,793,910
1899	32,533,497	21,536,052	+10,997,445
1900	26,190,873	18,397,459	+ 7,793,414
1901	20,715,628	13,965,265	+ 6,750,363
1902	21,629,049	15,409,028	+ 6,220,021
1903	28,657,393	27,766,512	+ 890,881
1904	33,876,588	33,039,138	+ 839,450
1905	38,567,895	30,829,842	+ 7,738,053
1906	46,042,590	42,617,267	+ 3,425,323
1907	57,088,547	50,866,009	+ 6,222,538
1908	46,145,314	49,969,099	− 3,823,785
1909	54,691,829	47,249,536	+ 7,442,293
1910	57,321,767	50,898,445	+ 6,423,322
1911	48,693,753	40,100,540	+ 8,593,213
1912	52,688,881	46,538,469	+ 6,150,412
1913	59,533,549	46,087,359	+13,446,190
1914	58,642,211	30,599,050	+28,043,161
1915	10,828,366	39,218,113	−28,389,747
1916	17,790,302	38,338,912	−20,658,610
1917	..	..	..
1918	..	..	..
1919	..	..	..
1920	50,678,283	92,565,137	−41,886,854
1921	49,676,047	59,348,158	− 9,672,111
1922	34,542,167	44,838,292	−10,296,125
1923	43,986,655	57,434,355	−13,447,700
1924	35,791,664	49,419,607	−13,627,943
1925	41,460,892	49,674,766	− 8,213,874
1926	38,547,498	27,128,223	+11,419,275
1927	32,447,287	28,153,357	+ 4,293,930
1928	47,808,055	60,523,701	−12,714,646

APPENDIX VI

ORIGIN AND DESTINATION OF GOLD IMPORTS AND EXPORTS SINCE 1925

The following tables, compiled from official statistics, show the principal countries of consignment and destination of the gold shipments of the United Kingdom since 1925:

IMPORTS

Country.	1925.	1926.	1927.	1928.
Arabia	..	..	£250,000	£281,000
Australia	£1,068	£8,750	..	1,005,694
Austria	..	238	..	..
Belgium	..	595,736	18,591	37
British West Africa	1,236,813	1,293,108	966,903	695,293
Canada	69,758	..	..	979,000
Denmark	..	..	402,064	..
Dutch East Indies	..	22,828	..	..
Egypt	..	..	..	269,035
France	123,983	164,897	128,987	187,494
Germany	..	5,811	39,112	52,946
Gibraltar	..	54	..	..
Irish Free State	..	..	..	693,364
Italy	..	..	74	..
Kenya	..	3,625	..	..
Netherlands	5,094,795	241,405	475,268	29,727
Poland	2,036,736	..	..	..
Rhodesia	2,081,978	2,022,494	1,224,300	1,084,991
Roumania	..	..	823,890	..
Russia	4,277,385	2,537,492	215,566	3,818,397
South America	10,660	..	414,421	239,695
Spain	..	..	90	2,000,065
Straits Settlements	..	..	..	14,497
Sudan	33,351	..	..	..
Switzerland	..	..	308	..
Union of S. Africa	22,273,555	31,516,252	25,551,751	29,689,140
United States	4,275,633	37,082	1,760,353	6,684,840

EXPORTS

Country.	1925.	1926.	1927.	1928.
Arabia . . .	..	..	£30,000	£10,000
Argentine, Uruguay, and Paraguay .	£170,430	£262,000	1,425,000	..
Australia . .	105,278	1,055,960	817,800	1,270,124
Belgium . .	211,035	247,777	1,226,094	715,673
British West Africa .	49,330	7,451	4,025	3,256
British India . .	12,976,925	2,633,961	2,560,872	2,213,090
Canada . .	930,000	450,000	..	1,000,000
Ceylon . .	390,000	544,950	28,850	..
China . . .	32,814	44,050	..	..
Denmark . .	..	..	5,775	..
Dutch East Indies .	220,095	8,850	..	64,180
Egypt . . .	647,970	246,400	780,705	284,435
France . .	530,866	1,696,603	969,404	19,968,833
Germany . .	5,849,346	12,554,569	5,170,379	21,046,590
Gibraltar . .	68,070	15,000	..	..
Italy . . .	60,000	..	76,953	154,105
Kenya . . .	46,553	45,975	55,845	58,149
Netherlands . .	9,741,280	3,021,518	1,332,685	715,673
Poland . .	..	..	4,739,234	892,191
Roumania . .	..	..	..	715,200
Russia . . .	380,648	1,057,000	1,588,820	..
South America (apart from Argentine, Uruguay, and Paraguay)	286,600	55,000	5,000	..
Spain . . .	120,644	431,265	1,529,925	40,946
Straits Settlements .	1,607,511	1,592,929	709,296	372,002
Sweden . .	200	..	53,376	500,848
Switzerland . .	5,053,760	871,599	1,276,657	2,772,716
United States .	10,095,281	233,800	5,762,311	6,602,592

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